COVER SHEET

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REQUEST FOR PROPOSALS
For

Traffic Signal Maintenance & Repair Services

RFP # 2024-132

Sealed proposals will be accepted until 2:00 PM CT, **October 2, 2024,** and then publicly opened and read aloud thereafter.

GridMatrix, Inc.
Legal Name of Proposing Firm

Nicholas D'Andre — CEO
Contact Person for This Proposal — Title

650-272-9249 — ndandre@gridmatrix.com
Contact Person Telephone Number — Contact Person E-Mail Address

801 Barton Springs Road, Suite #07-117, Austin, Texas, 78704
Street Address of Principal Place of Business — City/State — Zip

801 Barton Springs Road, Suite #07-117, Austin, Texas, 78704
Mailing Address of Principal Place of Business — City/State — Zip

Michael Areen — COO
Point of Contact for Contract Negotiations — Title

+1 (858) 353-6258 — mareen@gridmatrix.com
Point of Contact Telephone Number — Point of Contact Person E-Mail Address

Acknowledgment of Addenda (initial): #1 X #2 X #3 X #4 X #5 X

NOTE: Any confidential/proprietary information must be clearly labeled as "confidential/proprietary". All proposals are subject to the Texas Public Information Act.

(Cover Sheet)

TAB A - CAPACITY TO DELIVER

Describe and clearly indicate any exceptions to the specifications, options or alternatives as found in Section 4 of this RFP. You should also indicate any major requirements found in any other Section of this RFP that you cannot meet or wish to make exception to or deviation from.

GridMatrix provides a software-as-a-service solution that delivers data, analytics, and insights on roadway and other critical infrastructure operations, efficiency, and safety. Data specifically on traffic signal and signalized intersection performance are Included in this suite of information. GridMatrix is responding to this RFP and bidding on providing its software platform and related services under Service Category #3: Ancillary Service, Maintenance, Equipment & Supplies.

GridMatrix is not bidding on Service Category #1: Preventative Maintenance Services, or Service Category #2: Emergency & Non-Emergency Repair Services.

GridMatrix's software solution is explained in detail later in this section, in response to the question "Provide your narrative response to Section 4.1 and 4.2 of this RFP."

Describe your firm's capabilities to deliver the products offered in a timely fashion.

Should GridMatrix's solution be sought for a deployment, the company will use the following methodology to ensure quality control, including for projects which have quick turnarounds. The company's Management Approach (MA) and Task Approach (TA) to executing this project's scope of work consists of the following steps:

NCTCOG Sample Deployment Timeline

	Month	Month 1				Month 2				Months 3 - End				End Month	
	Week	W1	W2	W3	W4	W1	W2	W3	W4	W1	W2	W3	W4	W1	W2
TA-1	Edge Sensor Connection & Setup														
MA-1	Need Definition														
TA-2	Data Pipeline Activation + TMC integration														
TA-4	Quality Assurance (Validation/Calibration)														
TA-3	Dashboard + API Deployment														
TA-5	User Account Provisioning														
MA-4	Progress Reporting & KPI Measurement														
MA-3	Training & Support														
TA-6	System Operation														
TA-7	Data Sharing														
TA-8	Project Conclusion														
MA-2	Deployment Task Tracking														

MA-1) Need definition (Approximate time ~4 weeks): Externally facing meetings with users (in-person or via video conference), calls, and written material exchange as needed to align scope. Additionally, GridMatrix will collect data from users on project requirements and system specifications. During this time, GridMatrix's project management team will also establish project milestones and define quantitative KPIs to measure project impact and success.

MA-2) Deployment Task Tracking (Ongoing basis): Internally facing meetings where GridMatrix's project management team will track tasks TA-1 - TA-8 to ensure timely delivery and overall project schedule integrity. GridMatrix uses Jira for technical project management purposes, allowing all team members to continuously view progress and issue reporting. During this time, GridMatrix's project management team will provide weekly updates to users on deployment progress.

MA-3) Training & Support (Ongoing basis): Once GridMatrix's dashboard has been deployed and user accounts provisioned, GridMatrix will provide users with credentials and hold a kick-off meeting to orient them to the platform. GridMatrix provides users with "train the trainer" onboarding. During this session, in addition to covering operations, troubleshooting, configuration, administration, calibration, and maintenance procedures, GridMatrix will work with each of the users to explain how to train other users on the system. Under the train the trainer system, GridMatrix expects to help certain customer users learn the ins and outs of the software to an extent that they will be able to be front-line experts. After the initial session, the project management team will provide bi-weekly check-ins for any additional questions, in-person meetings when necessary, and will otherwise be available for video, call, or email to provide additional support whenever necessary to maximize platform impact.

MA-4) Progress Reporting & KPI Measurement (Ongoing basis): GridMatrix's project management team will report on milestone progress to the user's project manager. Additionally, GridMatrix's project management team will report on the project's KPIs to measure impact and success. These KPIs may include the number of underperforming intersections identified, the number of successful changes made at underperforming intersections, and the number of stakeholders engaged and utilizing the data.

GridMatrix Task Approach (TA) to Executing this Task Order: Deploying GridMatrix's dashboard and enabling it consists of the following sequential steps:

TA-1) Sensor connection and setup (Approximate time ~4 weeks): This step involves installing edge hardware and integrating any desired pre-existing sensors to GridMatrix's platform. This requires getting the internet connection online for each sensor and locating the IP address and location of each sensor (e.g. intersection cross streets). GridMatrix will work to define the intersections' virtual loops and boundaries and incorporate data feeds.

TA-2) Data pipeline activation + TMC Integration (Approximate time ~2 weeks): With IP addresses and locations for each intersection, GridMatrix's engineering team will create a data pipeline in that ingests live, raw data from each intersection, processes it, and then outputs signal performance metrics as well as congestion, emissions, and safety information for the purposes of analytics, reporting, and traffic control.

TA-3) Quality assurance (QA) (Approximate time ~2 weeks, followed by an ongoing basis): GridMatrix's engineering team will perform QA checks on users' dashboards, ensuring that both content and functionality are to the highest standards. For functionality, this includes filtering and latency checks. For content, this includes accuracy certifications achieved by processing raw data samples (such as controller data and video clips) manually and validating automatically processed results from (TA-2).

TA-4) Dashboard & API deployment (Approximate time ~2 weeks): GridMatrix's engineering team will create

a web-based dashboard for users and connect to the data pipeline from (TA-2), populating it with live and historical data. GridMatrix will deploy its API for integration with Blue-Band Integrator-AI™ for traffic control

TA-5) User account provisioning & handoff (Approximate time ~1 day): GridMatrix's engineering team will create user accounts for relevant stakeholders with an email alias as a username and customer password, delivering these credentials to enable dashboard access.

Total time required to start receiving results from the first sensor is approximately 4 weeks, with full data pipeline activation across all sensors by month 4 at the latest. This time may be shorter or longer depending on the size of on-call installation support and/or time restrictions, and will generally scale with the scope and complexity of the customer's specific needs. Additionally, GridMatrix's engineering team will support these ongoing system operations:

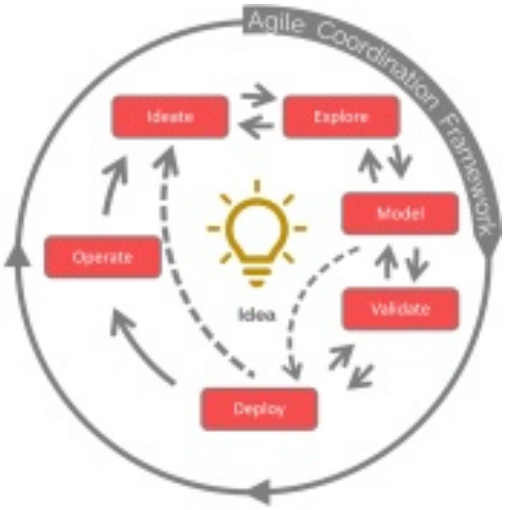
TA-6) System Operation (Ongoing basis): GridMatrix's engineering team will monitor the user's dashboard on a daily basis to ensure the system is exceeding requirements in all respects. GridMatrix's engineering team maintains internal dashboards that report on camera outages, data pipeline interruptions, and other abnormalities that allow them to proactively address issues before they result in user-facing service interruptions.

TA-7) Data Sharing (Ongoing basis): Data is accessible to users through multiple means. Users may access visual and graphical analyses via GridMatrix's dashboard. Custom graphs may be created and downloaded via filtering and then downloaded as image or .pdf files. Raw data underlying the graphs may also be exported via .csv or .xlsx to a Microsoft Excel file. Additionally, GridMatrix's dashboard provides for custom report building, whereby users can create their own reports based on filters or parameters they specify. These reports can be run on a one-time basis or delivered via email for any period of time (e.g. hourly, weekly, monthly, etc.). Furthermore, GridMatrix's system includes an API whereby users can query and export raw data to incorporate into other software platforms, analyses, simulations, and processes on a programmatic basis. GridMatrix's engineering team is also available to assist users to report generation and maintenance.

On-Call Consultative Services: If a user requires additional services such as advanced data analysis, or interpretation, custom reporting/writing/graph creation, collaboration with other vendors, etc. as part of its task order, GridMatrix will provide these services on an hourly basis to support the project. GridMatrix is available to provide these services via email, slack, phone call, in-person, or via video conference, and will use Jira for task tracking and project scheduling. GridMatrix has also assisted cities with grant preparation and provided information for Peachtree Corners' successful FY2023 Safe Streets For All grant application.

GridMatrix employs a "directly responsible individual" (DRI) system to ensure timely project completion. For this project, the DRI for the project as a whole will be the project manager, CEO Nicholas D'Andre. D'Andre will handle coordination of this contract with other concurrent work, remain in contact with the customer and host regular meetings, maintain sufficient staffing to perform the work, and maintain the administration of the contract, including updating the customer about the project status and the budget. Each task is assigned its own DRI responsible for deadline delivery and a red-yellow-green high/medium/low technical risk assignment per task to create a task priority matrix. Red risk assessments are deemed "project blockers," yellow are "project inhibitors," and green are either "neutral" or "accelerants" to project delivery.

These risk assessments are reviewed in a scrum Agile project management setting by the project manager and the DRIs with red and yellow risk items. The scrum agile framework breaks work into goals to be completed within "sprints" of work with defined timelines of no more than one month, typically two weeks. During this summit, technical risk mitigation strategies for resolution are identified, additional tasks created, project schedules amended (if at all), and then executed by the DRIs and their supporting team. All changes



are reflected in a Gantt chart which is live updated and shared with our customers. If technical risks arise that will impact the schedule of product delivery >1 week, the DRI is responsible for communicating with the project manager. The manager then elevates the issue to the client point of contact for immediate communication of the issue with resolution plans and timelines for approval. Budget tracking is undertaken in parallel with project management.

At the conclusion of the requirements gathering phase, the GridMatrix technical team uses sprints to develop and track project work. Items are pulled down from the backlog, and weekly planning and retrospective meetings take place to track overall progress. Weekly to bi-weekly meetings with customers are included in this process to ensure that deliverables are aligned with the overall roadmap for development. Using an Agile methodology allows for a combination of design, planning, and development during an iterative process toward delivery. This process also facilitates customer feedback during the requirements gathering, planning, design, development, verification, deployment and maintenance phases to ensure that deliverables align with the needs of the customer.

Our QA process then checks our developments in test environments. This includes unit, integration and regression testing, as well as quality checks on the front end for data integrity and accuracy. Upon passing QA, the project enters a deployment phase. In this phase, the systems are brought up in production environments or new features are released into production. The systems are monitored for reliability and maintained for customer use. GridMatrix maintains a communication channel to field any customer issues for quick resolutions.

The GridMatrix team maintains a weekly standing planning meeting towards tracking overall project progress and delivery. This meeting includes commercial, product, and technical teams to ensure the weekly goals are tracking towards milestones and delivery, as well as identifying any blocking issues. For the technical team, work items in the form of user stories are added to a backlog to define the scope of work for the upcoming sprint cycle. Previous work and the current backlog may be reviewed to add or reprioritize work as needed.

KPIs for measuring project progress & success could include:

Goal	KPI
Integrate existing cameras or other datasets into GridMatrix platform	-# of cameras/datasets successful integrated -achieve 99% system uptime (while cameras are also working)
Integrate wit ATMS	-# of controllers integrated with SCOOT -# of calls changed by multimodal detection logic
Detect multiple road user classes at customer intersections	-% accuracy for pedestrian detection -% accuracy for cyclist detection -% accuracy overall system in a variety of conditions (day, night, weather events)

Generate V2X messages	-# of V2X messages generated
GridMatrix provides real time and historical metrics on congestion, safety, and signal performance	-# of intersections providing data feeds -dashboard + bulk data provided via dashboard and API -# of recurring reports created by the customer users
Identify hazardous roadside areas over time	-# of hazardous intersections/deployment areas quantified -quantifying hazard level in terms of # and severity of near miss incidents -# of near misses avoided post installation compared with # detected pre-installation
Customer personnel uses the data	-# of monthly active platform users
Provide data on asset uptime and reliability	-% uptime for assets -# of intersections below 80% uptime identified
Real-time safety notifications & reporting	-provide real-time alerts for in-progress safety issues

List the business location(s) out of which your firm's team members will work from. You are encouraged to provide options to cover multiple geographic areas outside of Dallas/Fort Worth.

To service NCTCOG customers, GridMatrix will work out of two primary locations:

- GridMatrix, 801 S Barton Springs Road, Suite #07-117, Austin, Texas, 78704
- GridMatrix, 2443 Fillmore St #380-6286, San Francisco, CA 94115

Beyond GridMatrix's offices at these locations, GridMatrix personnel may also work from Amazon Web Services (AWS) offices nationally. These offices are listed here - Amazon Web Services Global Office Network

Provide an overview of Proposer's organization, size, years in business, and experience; major clients; and other information that you feel would assist in our evaluation process.

- **Size**: GridMatrix currently employees 10 full-time employees, all of whom are located in the United States and work from its offices in Austin, TX and/or San Francisco, CA
- **Offices**: GridMatrix maintains two offices, with one location in Austin, Texas and its second in San Francisco, CA
- **Years in Business**: GridMatrix was incorporated in January 2021 and has been in continuous operation since (3+ years in business)
- **Experience, Major Clients, Other Information**:

GridMatrix has deployed its award-winning software platform for transit analytics with 15 customers in 10 states, and worked across multiple levels of government including city, county, state, and federal entities, as well as universities. A full list of GridMatrix deployments is below:

GridMatrix has worked across levels of federal, state, and local government

Project Experience Summary by Level

US Federal Government: GridMatrix was selected to participate in The Opportunity Project (TOP), a collaborative initiative between the US Census Bureau and US DOT. The program's mission is to provide support to innovative startups that can help solve the nation's most pressing challenges. From Q4 2022 to Q1 2023, GridMatrix was part of the program's winter cohort and collaborated with a team of US DOT data scientists on how to make transit more resilient to climate change. GridMatrix prototyped a solution that combined data from existing roadway sensors, real-time fleet asset data from NYC MTA buses, and NOAA

weather data to create a real-time picture of bus route transit risk. GridMatrix's engineering team presented this solution at TOP's annual demo day.

State DOTs: GridMatrix has received RFP awards from 3 state DOTs, including the states of Arizona, Georgia, and Texas. Arizona has contracted with GridMatrix to provide on-call support for its research and development initiatives. Georgia has contracted with GridMatrix as part of its statewide Intelligent Transportation Solution (ITS) Marketplace, and is currently evaluating GridMatrix for implementation on existing state-operated roadway cameras for data collection and incident detection. The State of Texas Department of Information Resources has whitelisted GridMatrix, enabling multiple state, county, and city entities both in and out of Texas to directly procure GridMatrix's software. We have also received a contract from the Purchasing Cooperative of America, which allows us to sell directly to multiple states and thousands of local government entities across the country.

Counties & Cities: GridMatrix has launched its solution in Bellevue, WA, Morrisville, NC, Peoria, IL, Pleasanton, CA, Peachtree Corners, GA and Maricopa County, AZ and has upcoming projects in Denver, CO, Maricopa County, AZ, and San Mateo, CA. These governments are utilizing GridMatrix for:

- Congestion Management - to gather accurate data on vehicle and pedestrian counts, as well as cyclist traffic data
- Signal Performance - to optimize signal light timing
- Emissions - to gather data on emissions, particularly on heavy vehicles and freight traffic in residential neighborhoods
- Safety - to gather data on near misses and support both Vision Zero & Safe Streets for All grant planning

It is also notable that in these deployments, GridMatrix has successfully integrated with data from multiple different cameras, LiDAR, radar, and inductive loops.

Airports: Los Angeles World Airports, the organization responsible for managing Los Angeles International Airport (LAX) and Van Nuys (VNY) airport has invited GridMatrix to demonstrate its technology at LAX. The airport is specifically interested in using GridMatrix with LiDAR at the roadside of LAX to:

- Count people and vehicle at curbside locations and on roadways, and baggage at curbside locations
- Accurately measure distances between vehicles, and between vehicles and curbs
- Monitor "near misses" between vehicles and people
- Determine vehicle speeds and identify vehicles through their characteristics

Universities: GridMatrix has launched its solution at California State University at Sacramento. The campus has a student population of 30,000 people and the university is interested in monitoring campus ingress and egress using GridMatrix's platform as well as monitoring pedestrian and cyclist safety via "near miss" monitoring on-campus. GridMatrix is launching a similar deployment at CU Denver's urban campus in Denver, CO.

Since 2021, we have deployed GridMatrix's platform 15 times. These include deployments in New York City on the world's busiest bridges and tunnels to deployments with counties, cities, towns, and universities. These deployments have collectively gathered millions of road user data points, which in turn have developed our world-leading AI algorithms for transportation safety analysis. GridMatrix's software has been competitively evaluated and selected for on-call service by multiple organizations, including Arizona DOT (ADOT), Texas DIR (TXDIR), the Purchasing Cooperative of America, and Georgia DOT (GDOT), as well as the Arizona-based Strategic Alliance for Volume Expenditures via Maricopa County. The Intelligent Transportation Society of America has recognized GridMatrix's software as a leading new innovative solution for sustainable and resilient infrastructure, while CoMotion Miami named our team the winners of the M2 Challenge.

GridMatrix is improving safety, sustainability, and equity outcomes in US cities and can help Seattle enhance mobility with respect to other areas outside of safety. Transportation planners in New York City have used GridMatrix's software to gather accurate, real-time emissions data from over 100,000 daily vehicle trips to determine their primary emissions drivers. Data Scientists at the Uthe customer are working with GridMatrix's engineering team to predict accidents and provide real-time safety alerts. We are Allies in Action with the Uthe customer and are dedicated to the NRSS Safe Systems Approach and Uthe customer Complete Streets policies.

Please provide a description of how your firm intends to interact with the Customer while providing services.

- **Virtual communication:** GridMatrix personnel are reachable by zoom, email, phone, and Slack (as well as other platforms if so desired by the customer)
- **Project Management**: GridMatrix uses Jira to track project management deliverables
- **Regular Meetings**: GridMatrix team members will meet regularly with customer team members to update on status, no fewer than bi-weekly
- **Site Visits**: As needed and as agreed with the customer, GridMatrix team members will conduct in-person and site visits to the customer's offices or deployment locations

Describe your invoicing process. Payment terms? Is payment by credit card accepted? Is a deposit required?

GridMatrix's payment terms are outlined in its Standard Terms & Conditions, section 4

4. PAYMENT OF FEES
4.1 Customer will pay GridMatrix the applicable fees described in the Order Form for the Services and Implementation Services in accordance with those terms (the "Fees"). All Fees are quoted and will be billed and due in U.S. Dollars. If Customer's use of the Services exceeds the Service Capacity set forth on the Order Form or otherwise requires the payment of additional fees (per the terms of this Agreement or additional Order Forms), Customer shall be billed for such usage and Customer agrees to pay the additional fees in the manner provided in this Section. GridMatrix reserves the right to change the Fees or applicable charges and to institute new charges and Fees at the end of the Initial Service Term or then-current renewal term, upon thirty (30) days prior notice to Customer (which may

be sent by email). If Customer believes that GridMatrix has billed Customer incorrectly, Customer must contact GridMatrix no later than 60 days after the closing date on the first billing statement in which the error or problem appeared, in order to receive an adjustment or credit. Inquiries should be directed to GridMatrix's customer support department

4.2 GridMatrix may choose to bill through an invoice, in which case, full payment for invoices issued in any given month must be received by GridMatrix thirty (30) days after the mailing date of the invoice. Unpaid amounts are subject to a finance charge of 1.5% per month on any outstanding balance, or the maximum permitted by law, whichever is lower, plus all expenses of collection and may result in immediate termination of Service. Customer shall be responsible for all taxes and government fees associated with Services other than U.S. taxes based on GridMatrix's net income.

Designate and provide names of specific contact person(s) for the following phases: (1) proposal evaluation process (2) contracting process (3) primary point of contact for receiving orders from participating agencies.

- (1) Proposal Evaluation Contact - Nicholas D'Andre, ndandre@gridmatrix.com, 650-272-9259
- (2) Contracting Process - Nicholas D'Andre, ndandre@gridmatrix.com, 650-272-9249
- (3) Order Reception - Nicholas D'Andre, ndandre@gridmatrix.com, 650-272-9249

Include a list of no more than five (5) similar contracts awarded within the last 5 years. These same five projects should be used as your references in Tab C.

Project #1 - NYC Bridges & Tunnels Get AI Traffic Analytics from GridMatrix
Sponsoring Agency: Port Authority of New York and New Jersey
Scope: GridMatrix deployed using existing cameras on the Lincoln Tunnel, Holland Tunnel, and George Washington Bridge to collect data multimodal data on traffic congestion, emissions, and safety including near-miss events

Project #2 - GridMatrix Texas DIR (Contract #DIR-CPO-5299)
Sponsoring Agency: Texas Department of Information Resources
Scope: GridMatrix was selected by the Texas Department of Information Resources (the State Technology Agency of the State of Texas) to provide commercial off-the-shelf "COTS" software services for roadway traffic analytics, critical infrastructure optimization, and other transportation planning and analysis use cases using edge sensors including cameras, radar, lidar, and inductive loops as well as supporting services.

Project #3 - **US DOT Partnership to Develop Predictive Models for Emergency Responders**
Sponsoring Agency: US Department of Transportation
Scope: GridMatrix developed a real time safety index for transit vehicles using near-miss data, crash data, and NOAA meteorological data

Project #4 - GridMatrix Deploys In Peoria, IL
Sponsoring Agency: Hanson Inc. on behalf of the city of Peoria

Scope: GridMatrix deployed its platform on existing Peoria 360 degree cameras to collect multimodal traffic data collection
Project Manager Name // Title

Project #5 - San Mateo County Deploys GridMatrix for Vision Zero
Sponsoring Agency: San Mateo County
Scope: GridMatrix is deploying its software along a critical corridor to measure near-misses and other safety metrics to help San Mateo County reach its vision zero goals

Additional Reference

Project #6 - GridMatrix Deploys At California State University, Sacramento
Sponsoring Agency: California State University, Sacramento
Scope: GridMatrix is operating its platform on Sac State's campus to gather data on pedestrian and cyclists counts, near misses, and campus ingress/egress

Identify any contracts within the past three years that were terminated due to non-performance.
None

Please state in your proposal what warranty or guarantee may apply to the goods or services you are proposing.
GridMatrix's warranty policy is outlined in its Standard Terms & Conditions, section 6 *6. WARRANTY AND DISCLAIMER* *6.1 GridMatrix shall use reasonable efforts consistent with prevailing industry standards to maintain the Services in a manner which minimizes errors and interruptions in the Services and shall perform the Implementation Services in a professional and workmanlike manner. Services may be temporarily unavailable for scheduled maintenance or for unscheduled emergency maintenance, either by GridMatrix or by third-party providers, or because of other causes beyond GridMatrix's reasonable control, but GridMatrix shall use reasonable efforts to provide advance notice in writing or by e-mail of any scheduled service disruption. GRIDMATRIX DOES NOT WARRANT THAT THE SERVICES WILL BE UNINTERRUPTED OR ERROR FREE; NOR DOES IT MAKE ANY WARRANTY AS TO THE RESULTS THAT MAY BE OBTAINED FROM USE OF THE SERVICES. EXCEPT AS EXPRESSLY SET FORTH IN THIS SECTION, THE SERVICES AND IMPLEMENTATION SERVICES ARE PROVIDED "AS IS" AND GRIDMATRIX DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT*

What is your standard response time for emergency traffic signal calls? Is this response available twenty-four (24) hours a day, including Saturdays, Sundays, and holidays? Please explain.
GridMatrix's response and support terms are outlined in its Standard Terms & Conditions, Exhibit A *EXHIBIT A* *Service Level Terms* *The Services shall be available 99.9%, measured monthly, excluding holidays and weekends and scheduled maintenance. If Customer requests maintenance during these hours, any uptime or downtime calculation will exclude periods affected by such maintenance. "Downtime" means any period of time during which no user is able to access the Services. Downtime does not include outages as the result of Customer or third party connections, equipment or utilities or other reasons beyond GridMatrix's control. Customer's sole and exclusive remedy, and GridMatrix's entire liability, in connection with Service availability shall be that for each period of Downtime lasting longer than 4 hours, GridMatrix will credit Customer 5% of that month's Service fees; provided that no more than one such credit will accrue per 24 hour period. Downtime shall begin to accrue as soon as Customer notifies GridMatrix (by contacting the help desk) that Downtime is taking place, and continues until the availability of the Services is restored. In order to receive Downtime credit, Customer must notify GridMatrix in writing within 24 hours from the time of Downtime. Failure to provide such notice will forfeit the right to receive Downtime credit. Such credits may not be redeemed for cash and shall not be cumulative beyond a total of credits for 1 week of Service Fees in any 1 calendar month in any event. GridMatrix will only apply a credit to the month in which the incident occurred. GridMatrix's blocking of data communications or other Service in accordance with its Policy shall not be deemed to be a failure of GridMatrix to provide adequate service levels under this Agreement.* *Support Terms* *GridMatrix will provide Technical Support to Customer via both telephone and electronic mail on weekdays during the hours of 10:00am through 5:00pm Pacific time, with the exclusion of U.S. Federal Holidays ("Support Hours")* *Customer may initiate a helpdesk ticket during Support Hours by emailing or calling the helpdesk at the email or phone number provided by GridMatrix to Customer.* *GridMatrix will use commercially reasonable efforts to respond to all Helpdesk tickets within one (1) business day.*

What is your standard response time for non-emergency traffic signal calls? Please explain.
Same as above.

What repair parts can you provide and what expectation if any do you have of the Customer to provide the repair parts?
N/A, GridMatrix is not providing repair parts as part of this proposal

Provide your narrative response to Section 4.1 and 4.2 of this RFP.

GridMatrix is responding to this RFP and bidding on providing its software platform and related services under Service Category #3: Ancillary Service, Maintenance, Equipment & Supplies.

GridMatrix is not bidding on Service Category #1: Preventative Maintenance Services, or Service Category #2: Emergency & Non-Emergency Repair Services.

GridMatrix's software solution is explained in detail below:

GridMatrix Solution Overview & Modular System Diagrams

GridMatrix's mission is to help cities understand their streets through data. GridMatrix's award-winning software solution utilizes data from any existing or new roadway sensors and available cloud-based data sources to efficiently resolve traffic, emissions, and safety challenges. Our technology uses patented AI and machine learning techniques to identify potential issues at intersections and roadways and isolate their root causes. Roadway operators can leverage our insights to make data-driven upgrades to the deployment areas, or directly actuate traffic signals, saving lives and improving traffic flow. The Intelligent Transportation Society of America recognized GridMatrix's software as a leading new innovative solution for sustainable and resilient infrastructure, and our technology and past deployments have been profiled numerous times in ITS International and Traffic Technology today.

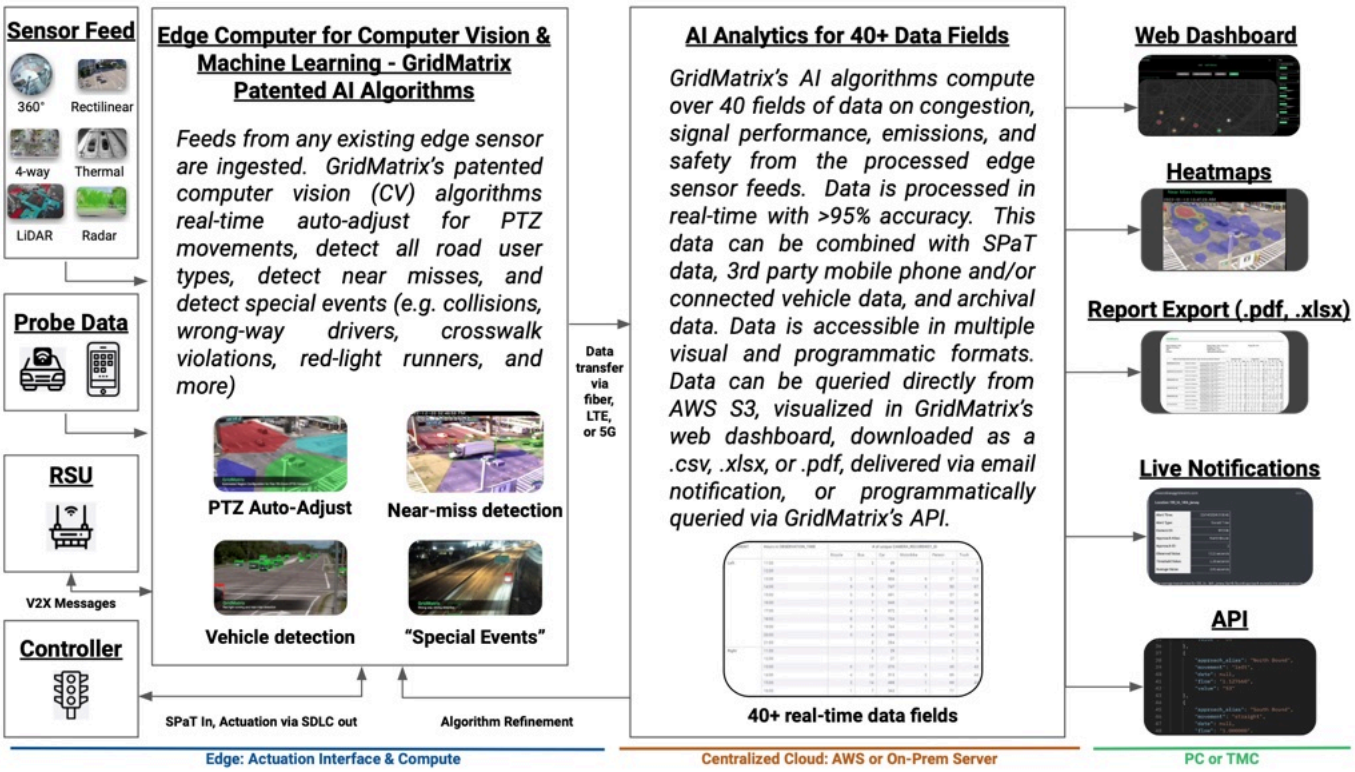
For the purposes of this RFP, GridMatrix will offer a modular, end-to-end intersection data collection and monitoring system that can be easily adapted to a customer's needs on a per-location basis, including:

- **[Multimodal Traffic Detection]** - Leveraging existing roadway and infrastructure detection sensors such as cameras, LiDAR, radar, and inductive loops
- **[Multimodal Traffic Data Collection, Analytics, Reporting]** - Either an edge (decentralized, edge computer using NVIDIA GPUs) or cloud-based (centralized, AWS single-tenant cloud or on-premise server with Nvidia GPUs) AI analytic engine architecture
- **[Road Safety Analytics & Reporting with API]** - A web dashboard and API user interface for data analytics and reporting with multiple data output formats

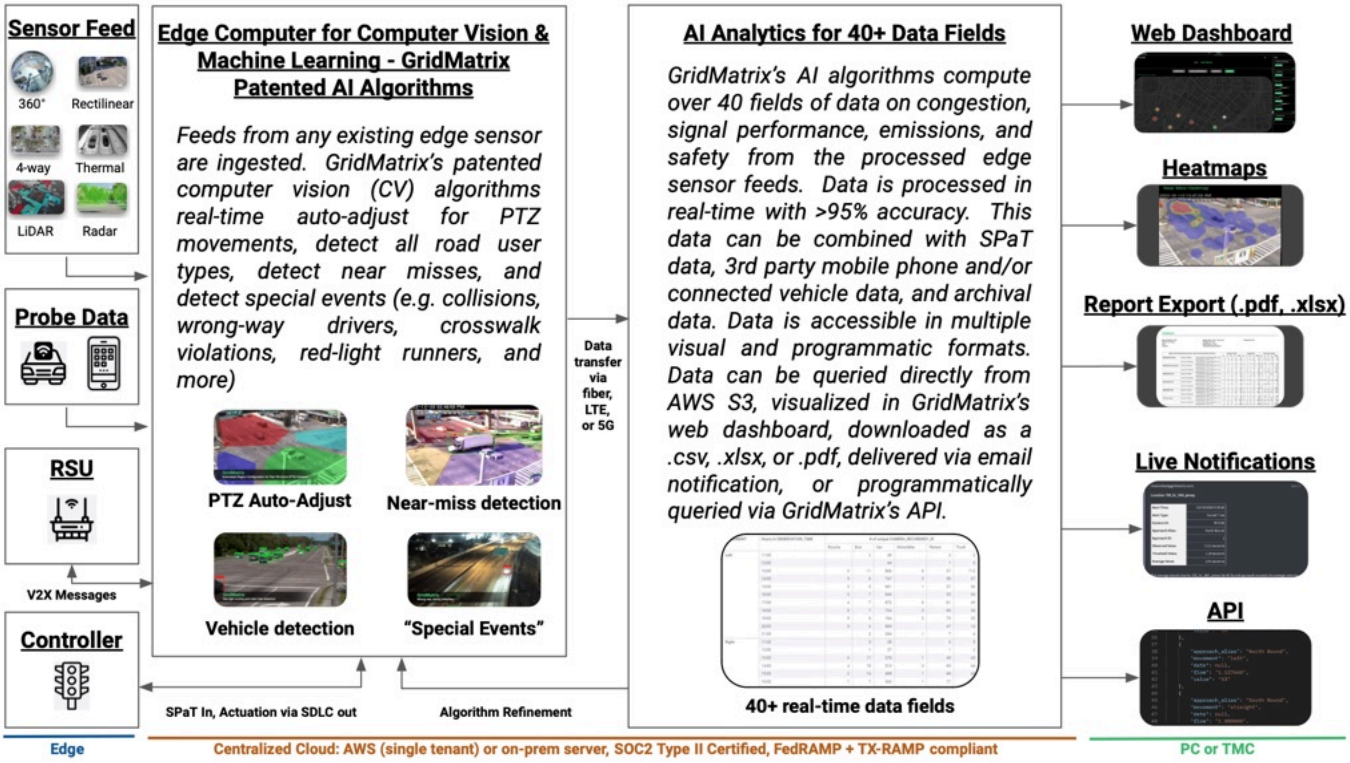
GridMatrix's data collection and monitoring system is built for modularity and customization based on user preferences and needs. Where the customer has existing cameras or other sensors for detection, GridMatrix's system can work with their raw feeds and process them into data regardless of sensor manufacturer. The data collection and processing of the raw sensor outputs can be performed in a centralized, single-tenant cloud environment or in an on-prem server. The output mechanisms for this process include a web dashboard, heatmaps, live notifications, and an API (delivered in JSON or geoJSON format). Data may also be delivered in a variety of static, common file formats (e.g. .png, .pdf, .xlsx, .csv, etc.). Options for both a decentralized, edge based (Option #1) and centralized cloud/on-prem-based (Option #2) versions of GridMatrix's analytic engine are presented on the following page. These system configuration options can be mixed and matched by discrete location across a deployment. **GridMatrix's software is built to scale and has been tested with over 1000 sensor feeds simultaneously.**, supporting the RFP's initial deployment scope, subsequent potential expansion, up to city-wide deployment. **GridMatrix meets the highest standards for data security and privacy. GridMatrix is SOC2 Type II Certified and**

TX-RAMP compliant. SOC2 Type II certification is confirmation from an independent 3rd party auditor that GridMatrix not only met or exceeded the highest standards for data security and privacy, we did so over a sustained period of time. We have also received TxRAMP certification and are whitelisted by Texas' Department of Information Resources, the official technology agency of the state of Texas. GridMatrix is a privacy-first platform that captures no personally identifiable information or biometric data (PII data). Images and video may be captured at the customer's option.

Option 1: GridMatrix Modular System Diagram - Decentralized Analytic Engine with Edge Compute



Option 2: GridMatrix Modular System Diagram - Centralized Analytic Engine via AWS or On-Prem Server

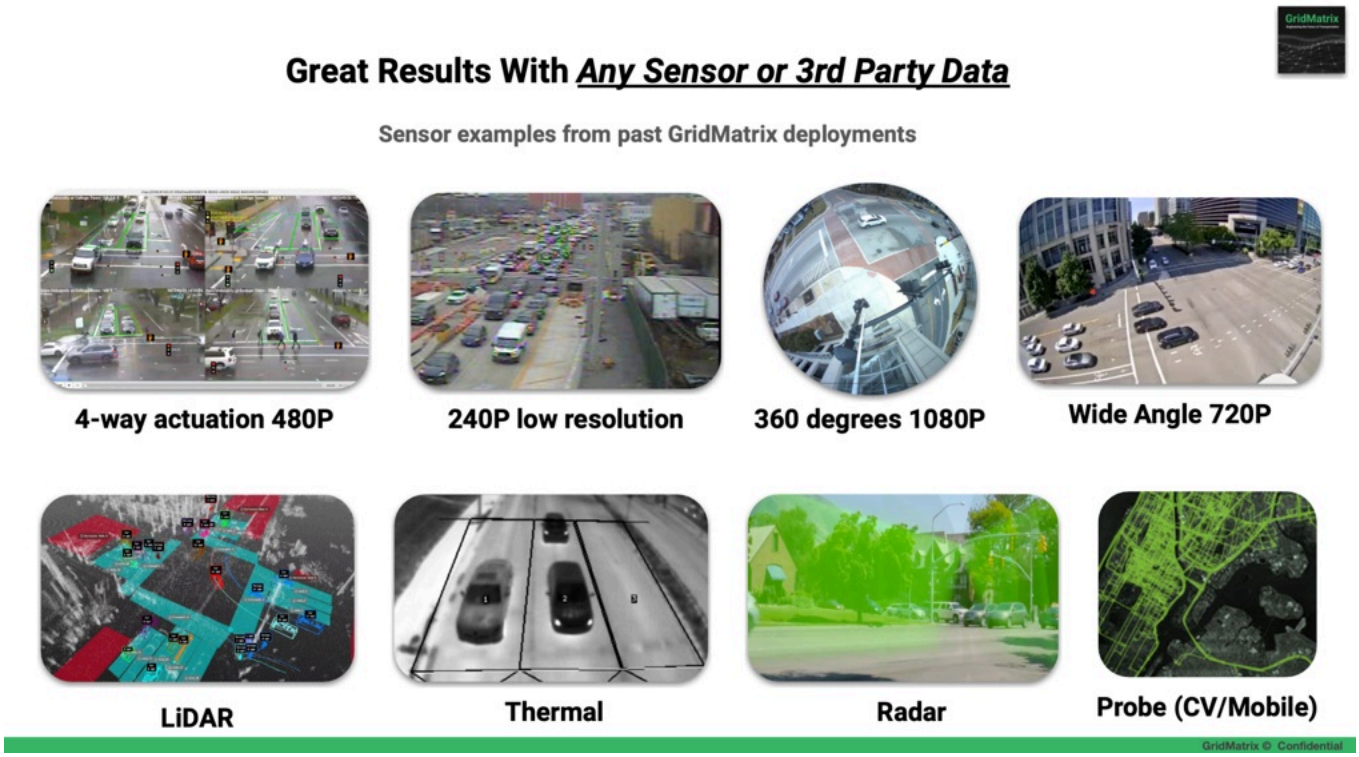


Multimodal Traffic Data Collection, Analytics, and Reporting

The GridMatrix platform is designed to be user friendly and intuitive. The platform has been streamlined to quickly deliver clear and actionable insights. This focus on creating impact from data has been incorporated into every layer of GridMatrix's platform, as well as the set of features developed to support active users.

GridMatrix multimodal data collection begins at the edge and includes ALL road users. Raw feeds from any existing or newly installed sensor are collected and processed. The amount of processing required is determined by the sensor's type. "Heavy" sensors such as cameras and LiDAR require a layer of computer vision (CV) algorithm to detect and classify **ALL** road users (e.g. pedestrians, cyclists, multiple FHWA vehicle classes, fleet vehicles, light rail, etc.) calculate their current and predicted trajectories, segment regions of interest, and determine each road user's geospatial location. This process is conducted on a frame-by-frame basis in real-time, and the result is a live stream relational data set. "Light" sensors such as radar, inductive loops, and probe data are already structured relationally and do not require the same level of intermediate processing as "heavy" sensors. Once all raw sensor data is structured relationally, it can be merged together for further processing into actionable KPIs on roadway congestion, signal performance, emissions, and safety.

GridMatrix's platform is compatible with any existing edge sensor. These include multiple types of camera with different resolutions, frame rates, and fields of view, LiDAR, thermal cameras, and radar.



After raw sensor data has been relationally structured, it can be algorithmically converted into actionable KPIs on congestion, signal performance, emissions, safety, and more. GridMatrix's software platform can process raw sensor feeds into more than 40+ fields of multimodal data in each of these four core areas on **ALL** road users. Our data collection process is continuous for as long as users elect to operate GridMatrix at an intersection. Users receive real-time data and historical data for the entirety of a GridMatrix deployment.

GridMatrix Data Fields

Timing: Real Time and Historical (as long as the solution has been deployed in a city)

Periods: Live data (by minute and second), Historical data (by yearly, quarterly, monthly, weekly, daily, hourly, minute, second) report increments

Data Filters: GridMatrix's software can filter all data with the distinctions below:

Intersection Views	Time	Object Class	Approach	Turning Movement	Signal Phase	Near Miss Pair
City grid (compare multiple intersections simultaneously)	Live data (last 15 minutes)	Vehicular (bus, car, motorcycle, truck)	Approach (e.g. northbound, southbound, eastbound, westbound)	Turning Movement (left, right, through)	Arrival on red	30+ discrete pairings between ALL road user classes
Single intersection (deep dive time series)	Historical data (user defined period)	Pedestrian (bicycle, person)			Arrival on Green	

Data Fields: GridMatrix's software delivers quantitative time series data for the following fields:

Congestion	Object volume	Count of objects
	Flow	Objects/min
	Idle time	Total and per object (seconds)
	Travel time	Total and per object (seconds)
	Queue length	Length in # of vehicles and feet
Signal Performance	Arrival on Green/Red	% objects arriving per phase
	Total Green/Red Time	Total phase time (seconds)
	Effective Green Time	Effective phase time (seconds)
	Average Green Time	Average phase time (seconds)
	Platoon ratio	Phase performance measure
Emissions	CO2 emissions	Emissions from CO2 (MT)
	Gas Consumption	Gas consumer (gallons)
Safety	Speed	Object speed (MPH)
	Near Misses	Near miss incident logging by PET, TTC and speed
	Special Events	Collisions, crosswalk violations, red-light running, and more

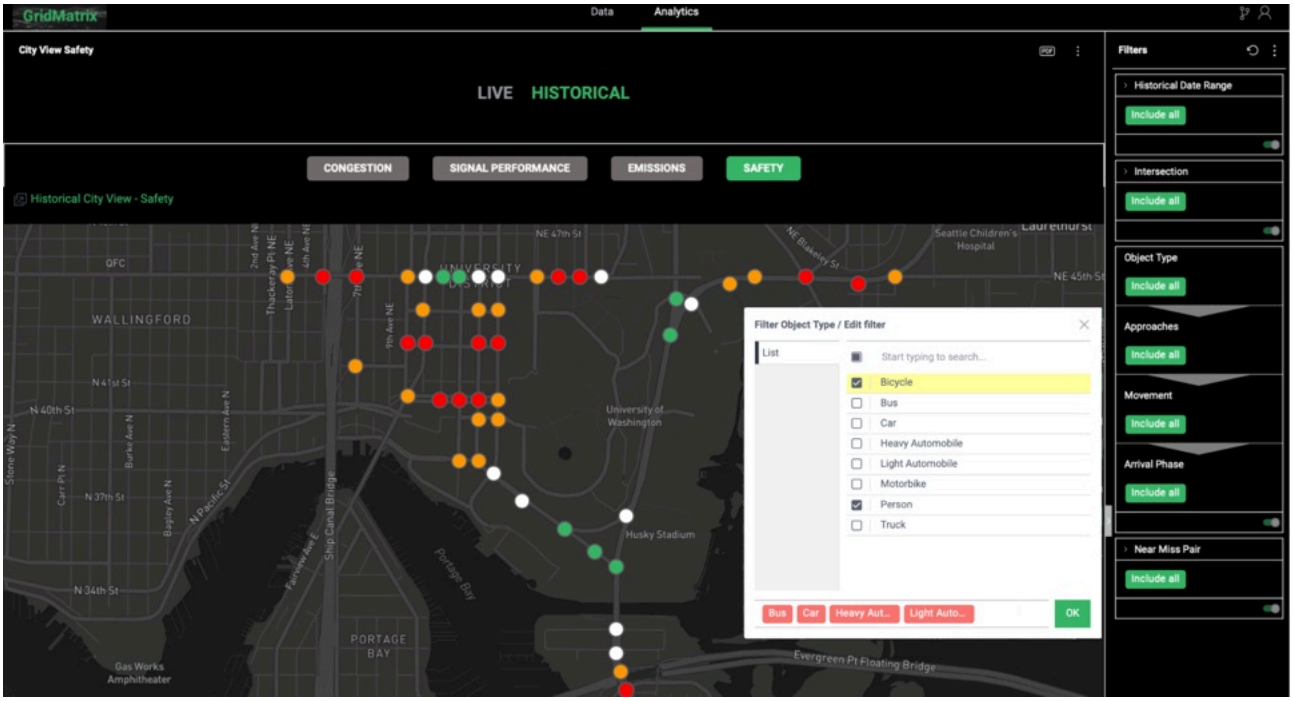
Setting Specific Metrics:

GridMatrix's platform can also provide data that is setting specific, such as data and KPIs relating to the apron of an airport, dock/bertside of a port, or other common critical infrastructure settings that are non-roadway.

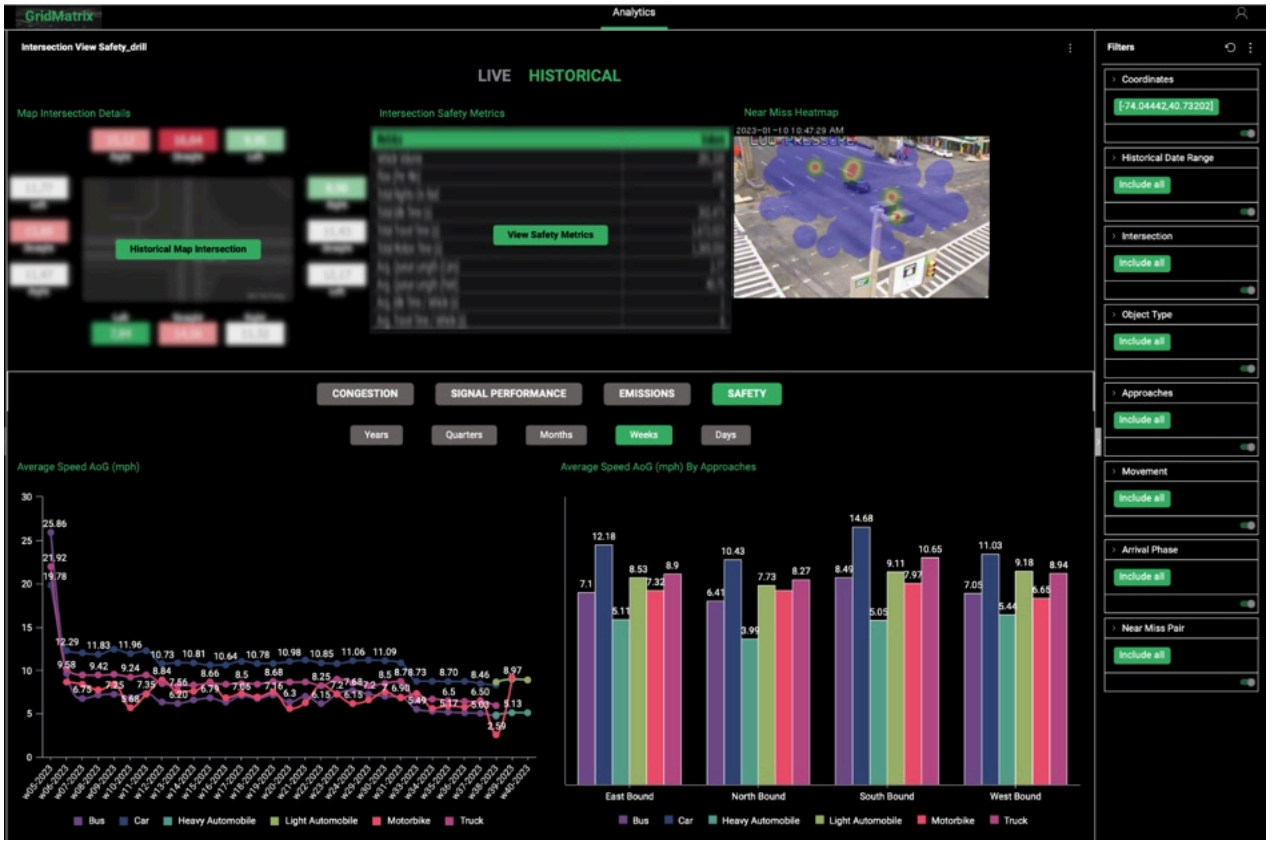
Once data has been algorithmically processed into KPIs on ALL road users, it is made available via web dashboard, heatmaps, static reports in all common file formats, push notifications, and API. Our data collection process is continuous for as long as users elect to operate GridMatrix at an intersection. Users will receive real-time and historical data for the entire period of GridMatrix's operation.

GridMatrix Dashboard & Heat Maps - "City View" & "Intersection View": GridMatrix's dashboard consists of two primary views, "City View" and "Intersection View". City View presents data geospatially and provides comparative analytics on an intersection-by-intersection basis, in both live and historical formats, for all classes of road user. Operators can quickly determine which locations are "hotspots" for any given data field, such as near-misses between specific pairings of road users. In the graphic below, near-miss pairings by road-user are selected for multiple intersection locations across a GridMatrix deployment area. Intersection View provides the same data as City View, however it is presented as a time series instead of geospatially.

"City View" - Geospatial data representation for intersection-to-intersection comparison in the GridMatrix Web Dashboard. *The GridMatrix Insights Web Dashboard's "City View", displaying historical near-miss safety performance metrics for all vehicular road users, cyclists and pedestrians in a customer's operating, with filtering by object class. City View allows users to quickly compare intersections against each other on all GridMatrix data fields.*

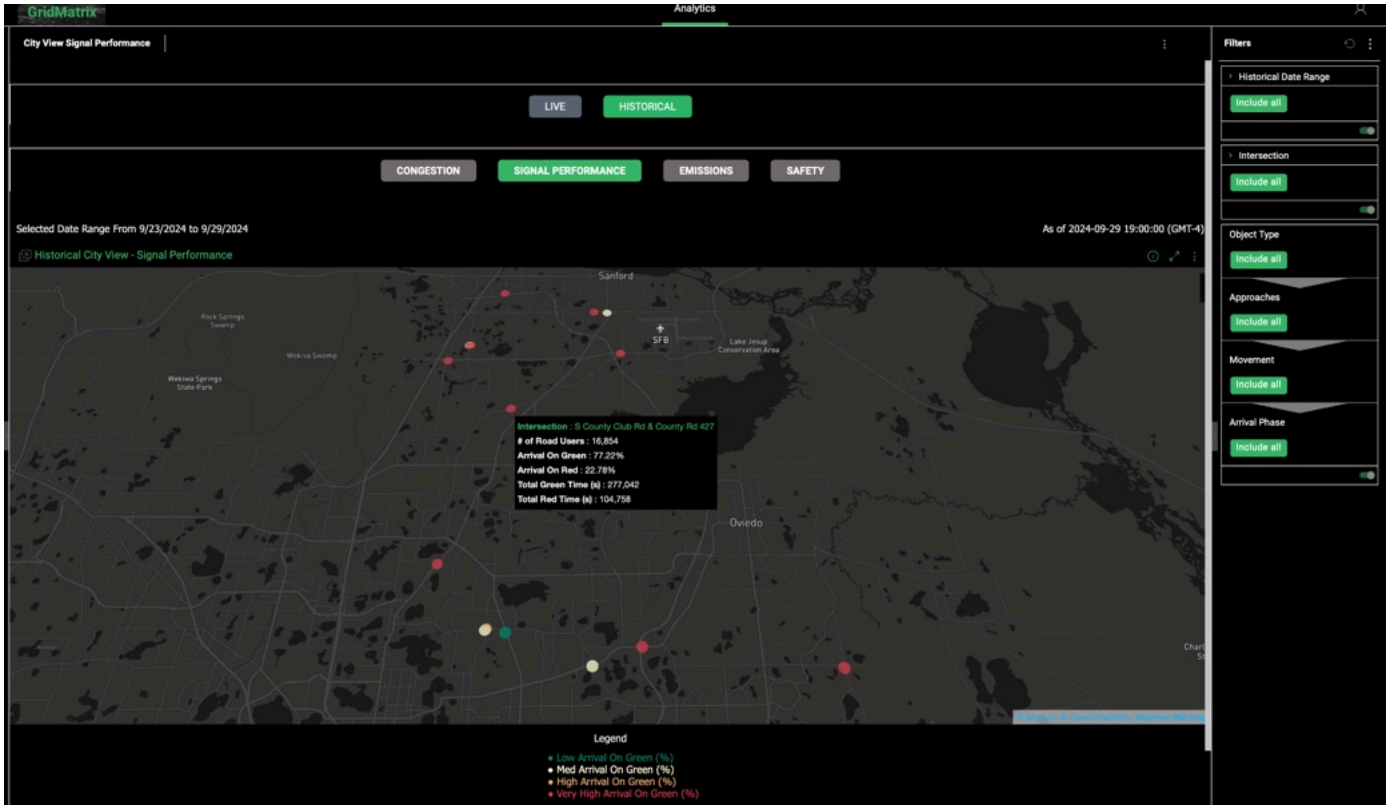


"Intersection View" - Time-series safety data representation for intersection deep-dive in the GridMatrix Insights Web Dashboard. *The GridMatrix Insights Web Dashboard's "Intersection View", displaying historical safety performance metrics and near-miss heat maps using existing PTZ cameras. As opposed to the "grid" view above, intersection view is meant to provide a detailed, time-series analysis of a single location. As with "grid" view, users may select live or historical data, KPI family (congestion, signal performance, emissions, and safety), as well as specify periodicity (months, weeks) and filter by multiple object classes as well as other parameters. The top row of intersection view includes special visualizations and reports to better understand a given location's traffic patterns. In the top left, an intersection map shows metrics by approach. The middle is a static report of all KPIs for a selected family (e.g. safety), while the right is a heat map of near misses. Intersection view includes heatmaps localizing data at a given deployment location. For instance, in the graphic below, a near miss conflict analysis is presented. The warmer the color, the more near-miss events occurring in a specific location.*



Congestion, Signal Performance, and ATSPM Metrics

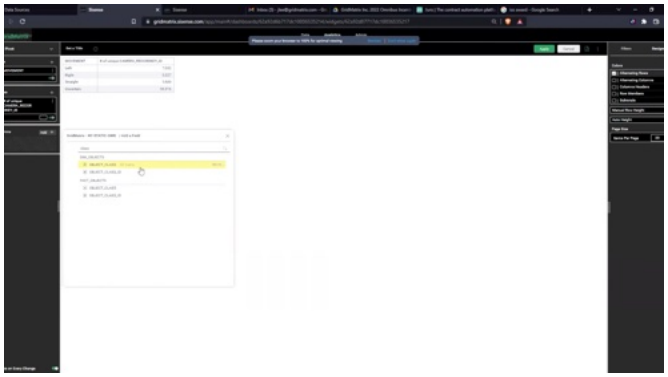
Signal Performance - City View: Signalized intersections are heat mapped by % arrival on green. This mapping can be scaled to other ATSPM metrics.



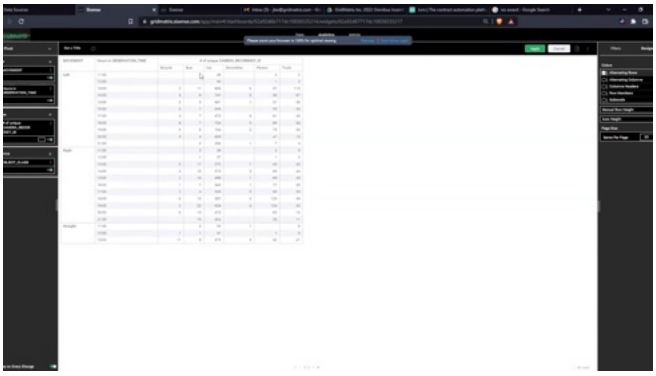
Signal Performance - Intersection View: ATSPM metrics are visualized in a time series and available for export.

Static Reports - Built for Interaction, Quickly Refine Queries & Export Data: The GridMatrix platform is built to be interactive. There are multiple ways to filter data, and it can be easily exported into all common file formats, including .png, .jpeg, .pdf, .xlsx, or .csv format. GridMatrix also provides the ability for users to create custom reports using SQL queries covering all of the 40+ data fields monitored by the platform

GridMatrix Custom Report Builder - Drag/drop fields or use SQL queries to extract desired data fields



User selects desired fields



User generates report

Custom Reports - *Custom near-miss report example exported to .pdf*

GridMatrix

Report Number: 0006
County: San Mateo
City:
Division:

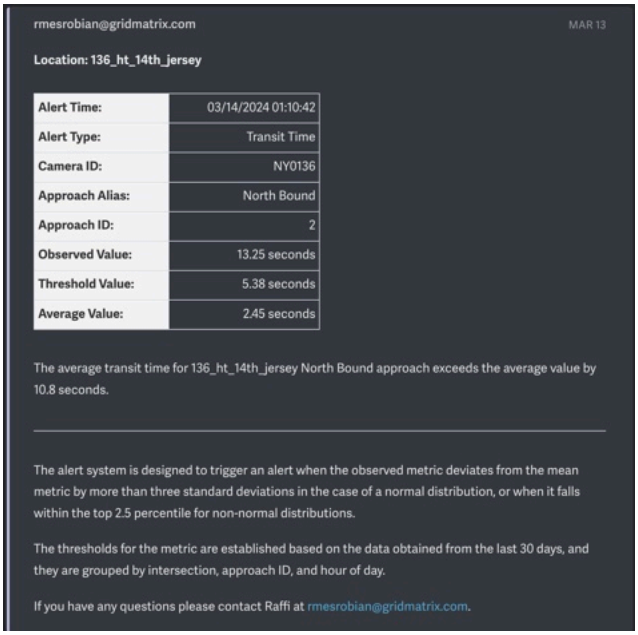
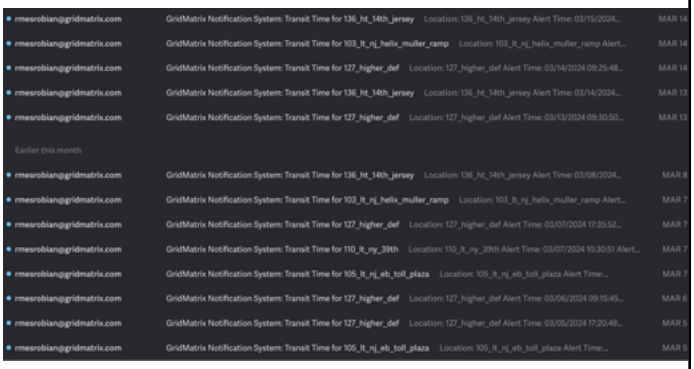
Report Type: Safety / Near Miss
Duration: 30 Days
Report Date: 11/2/23
Intersections Monitored: 5

Project ID: 0001

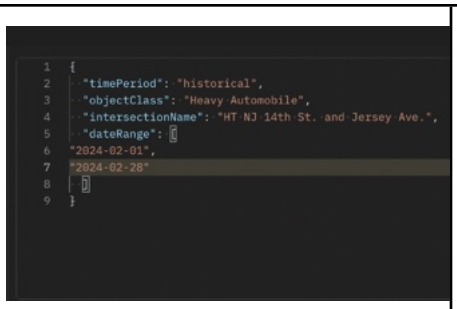
Safety Incident Report By Intersection, Type, Severity and Vehicle Direction			September 2023					August 2023					Historical Average				
			N	E	W	S	Total	N	E	W	S	Total	N	E	W	S	Total
Middlefield & Pacific	Vehicle On Vehicle	Critical Incidents / Near Misses (PET <0.5)	0	0	4	1	**5**	0	0	2	0	**2**	0.1	0.2	1.1	0.8	**2.2**
		Near Misses (0.5 < PET < 1.2)	6	8	28	16	**58**	4	9	33	28	**74**	5	8.5	30.5	22	**66**
	Vehicle On Pedestrian	Critical Incidents / Near Misses (PET <0.5)	0	0	1	0	**1**	0	0	1	0	**1**	0	0	1	0	**1**
		Near Misses (0.5 < PET < 1.2)	1	0	3	1	**5**	2	1	5	4	**12**	1.5	0.5	4	2.5	**8.5**
Middlefield & Dumbarton	Vehicle On Vehicle	Critical Incidents / Near Misses (PET <0.5)	6	0	1	0	**7**	5	0	1	0	**6**	5.5	0	1	0	**6.5**
		Near Misses (0.5 < PET < 1.2)	5	9	2	0	**16**	4	9	2	0	**15**	4.5	9	2	0	**15.5**
	Vehicle On Pedestrian	Critical Incidents / Near Misses (PET <0.5)	0	15	12	5	**32**	0	20	7	6	**33**	0	17.5	9.5	5.5	**32.5**
		Near Misses (0.5 < PET < 1.2)	2	17	11	1	**31**	2	21	10	1	**34**	2	19	10.5	1	**32.5**
Middlefield & 2nd	Vehicle On Vehicle	Critical Incidents / Near Misses (PET <0.5)	4	0	4	19	**27**	5	0	2	28	**35**	4.5	0	3	23.5	**31**
		Near Misses (0.5 < PET < 1.2)	0	1	12	2	**15**	0	1	14	2	**17**	0	1	13	2	**16**
	Vehicle On Pedestrian	Critical Incidents / Near Misses (PET <0.5)	0	0	2	1	**3**	0	0	3	1	**4**	0	0	2.5	1	**3.5**
		Near Misses (0.5 < PET < 1.2)	5	12	33	6	**56**	6	17	47	7	**77**	5.5	14.5	40	6.5	**66.5**
Middlefield & 4th	Vehicle On Vehicle	Critical Incidents / Near Misses (PET <0.5)	1	1	3	2	**7**	1	1	4	2	**8**	1	1	3.5	2	**7.5**
		Near Misses (0.5 < PET < 1.2)	4	9	18	1	**32**	4	12	23	1	**40**	4	10.5	20.5	1	**36**
	Vehicle On Pedestrian	Critical Incidents / Near Misses (PET <0.5)	2	0	5	0	**7**	1	0	7	0	**8**	1.5	0	6	0	**7.5**
		Near Misses (0.5 < PET < 1.2)	11	8	0	6	**25**	14	8	0	6	**28**	12.5	8	0	6	**26.5**
Middlefield & 5th	Vehicle On Vehicle	Critical Incidents / Near Misses (PET <0.5)	4	4	5	3	**16**	4	5	4	4	**17**	4	4.5	4.5	3.5	**16.5**
		Near Misses (0.5 < PET < 1.2)	22	13	19	29	**83**	28	16	22	40	**106**	25	14.5	20.5	34.5	**94.5**
	Vehicle On Pedestrian	Critical Incidents / Near Misses (PET <0.5)	0	0	0	1	**1**	0	0	0	1	**1**	0	0	0	1	**1**
		Near Misses (0.5 < PET < 1.2)	2	2	4	1	**9**	2	3	2	1	**8**	2	2.5	3	1	**8.5**
All Intersections	Vehicle On Vehicle	Critical Incidents / Near Misses (PET <0.5)	15	5	17	25	**62**	15	6	13	34	**68**	15.1	5.7	13.1	29.8	**63.7**
		Near Misses (0.5 < PET < 1.2)	37	40	79	48	**204**	40	47	94	71	**252**	38.5	43.5	86.5	59.5	**228**
	Vehicle On Pedestrian	Critical Incidents / Near Misses (PET <0.5)	2	15	20	7	**44**	1	20	18	8	**47**	1.5	17.5	19	7.5	**45.5**
		Near Misses (0.5 < PET < 1.2)	21	39	51	15	**126**	26	50	64	19	**159**	23.5	44.5	57.5	17	**142.5**

Notifications & Alerts via Dashboard, API, Email, SMS, & Text

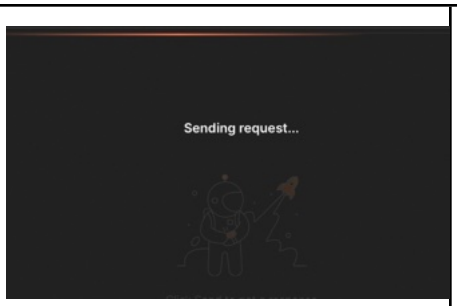
GridMatrix features real-time alerting for all of its metrics based on user-set thresholds as well as specific alerts for unsafe interactions via multiple channels. These interactions include stopped vehicles, collisions and near misses, loss of visibility events, crosswalk violations, hard stops, and occupancy exceeded alerts. These alerts can be delivered via email, text, dashboard, or via our API. Detector outputs can also be sent to the traffic signal controller. We are continuously developing our software and will shortly be launching new features, and have the capacity to develop new features based on customer needs, and provide all software updates free of charge to ensure our customers continuously operate the latest and most advanced edition of GridMatrix's platform. GridMatrix does not record video data by default but can enable it at a customer's request.

Notifications - Live notifications can be created for any data field using user-defined thresholds	**Notification Delivery** - Notifications can be delivered via email, text, dashboard, or via our API.
	

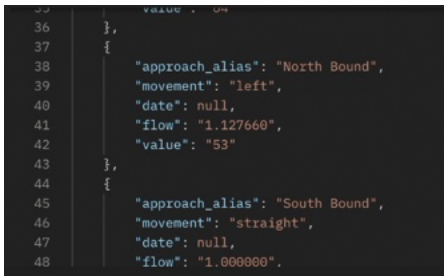
API - GridMatrix will provide bulk data access and query via its API (Please see the **API Documentation** section for more information). GridMatrix's platform includes an API that allows for users to directly query data from any data field, receive notifications, or integrate data into the TMC or other central repositories.



API: User inputs query request



API: Request transmission



API: Query output returned

Road Safety Analytics & Reporting

Definitions: **"Near Miss"**: incidents involving two or more road users with presently conflicting paths of travel that require one or more of the road users to make an adjustment to speed or heading or both to avoid a collision within a short period of time. **"Post-Encroachment Time" (PET):** PET is the difference between the time a leading object enters a point in their current path of travel that conflicts with a following object, and the time a following object in a conflicting path of travel arrives at the same point. **"Time-To-Collision" (TTC):** TTC measures the time until a collision would occur if existing speed conditions persisted. It is calculated by estimating the time it would take for two vehicles (or a vehicle and a pedestrian or bicycle) to

collide if they continued on their current trajectory, and is primarily used as a surrogate safety metric when a leading object and following object do not have a path of travel that conflicts (compared with PET where paths of travel conflict). GridMatrix continuously derives future position vectors for all moving objects and computes TTC for intersecting vectors. **PET & TTC are examples of "Surrogate Safety Metrics"**. Surrogate safety metrics are used to quantify the severity of a near miss. **"Special Events"** are incidents with elevated risk of roadway collision, fatality, property damage, or significantly disruptive impacts to traffic flow such as significantly congestion measured by idling and queue length increases, reduced signalized intersection performance efficiency measured by reduced arrival on green, and increased vehicular emissions.

GridMatrix collects data on the following safety related KPIs for all road users. All data fields below are available live (current by minute, second), historically with user-configurable periodicities (yearly, quarterly, monthly, daily, hourly, minute, second) since deployment inception, by road user type (e.g. cyclist, pedestrian, vehicle), by approach (e.g. northbound), by turning movement (e.g. left), by arrival phase (e.g. green), and for near misses by road user pair (e.g. truck-cyclist):

- Speed
- Count of near misses
- Near misses severity as quantified by PET/TTC
- Special events, including:
    - Disabled vehicles
    - Collisions
    - Crosswalk violations
    - Curb violations (e.g. double parking)
    - Work zone violations
    - Red light running
    - Wrong-way driving

GridMatrix's platform makes safety data visualization, reporting, and export, from all the fields above available in multiple formats, including:

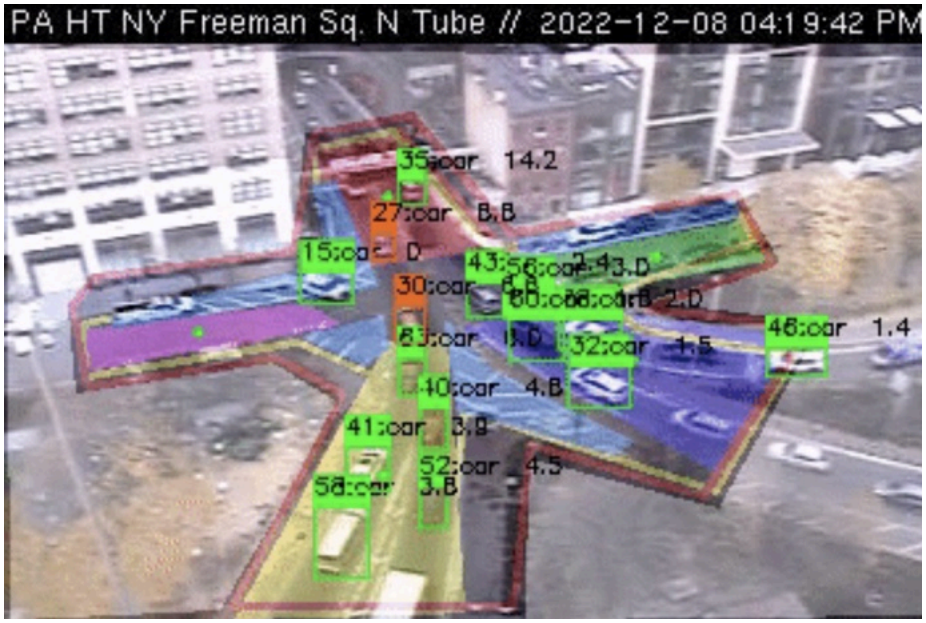
- "City View", where safety data is localized geospatially across a deployment area (see p.8)
- "Intersection View", where safety data is displayed as a time series (see p.9)
- "Custom Report Builder", where users can query data fields of their choosing and export the result as a .png, .jpeg, .pdf, .xlsx, or .csv file (see pp.12)
- Push notifications, where users can receive emails, texts, and other notifications for specific safety data fields of interest (see p.13)
- API, where users can bulk query safety data fields
- Raw Image and Video (.jpeg, .mp4, .flv): recordings of near-misses and other "special events" such as collisions, crosswalk violations, etc. can be captured and stored at the sole option of the customer

GridMatrix's patented machine vision algorithms underpin the generation of all safety data fields. The US Patent Office has granted GridMatrix the patent for near miss detection (see US11,955,001)

GridMatrix Near Miss Detection with PET: *Real time near miss example quantified with PET using existing intersection cameras with 240P, 12FPS cameras. Left image: a pedestrian (leading object) walks outside a*

crosswalk across a highway entrance. Middle image: a white vehicle (following object) turning right narrowly avoids hitting the crossing pedestrian, intersecting the pedestrian's path of travel with a conflicting path of travel. Right: the point of conflict between the pedestrian and vehicle is highlighted and recorded by GridMatrix's system for further review.

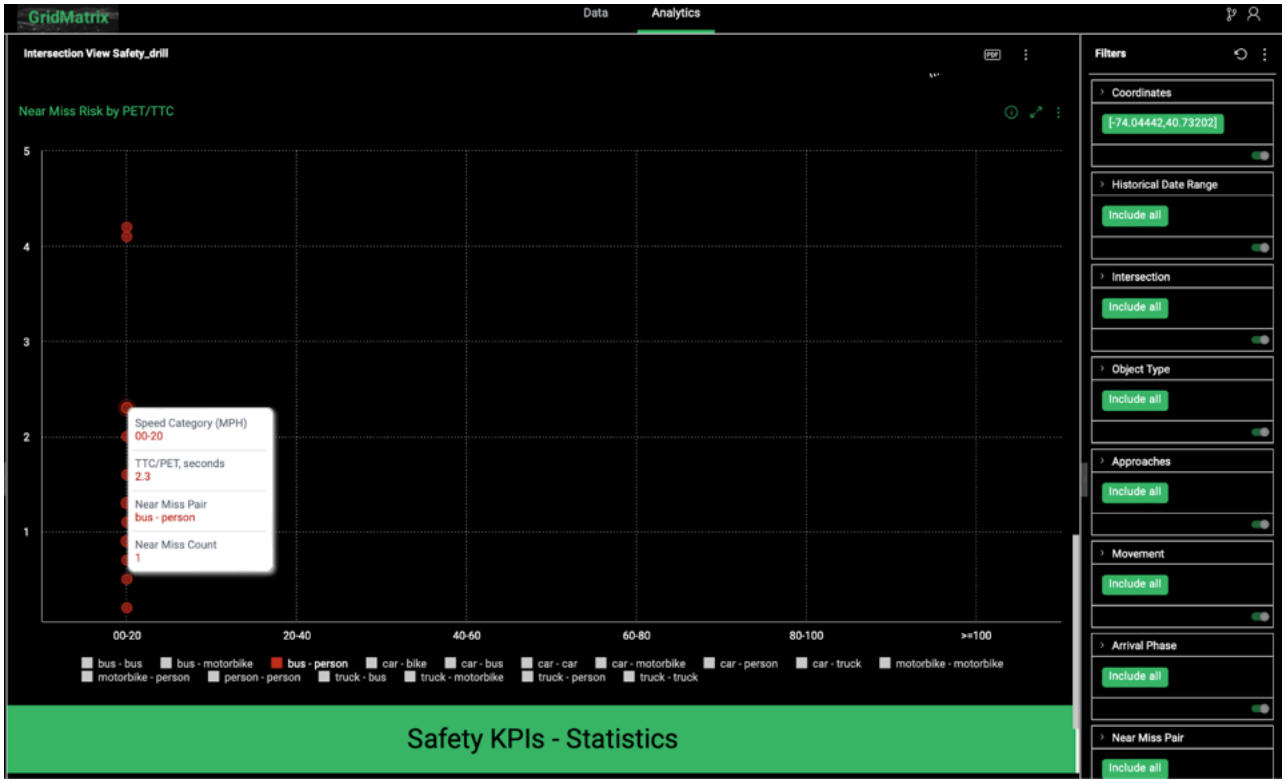
GridMatrix Near Miss Detection with TTC: *Real time near miss example quantified with TTC using existing intersection cameras with 240P, 12FPS cameras. Highlighted vehicles in orange are in the same path of travel. The leading object (#27) has stopped as it encountered congestion at a tunnel entrance. The following object (#30) must quickly decelerate to avoid a collision.*



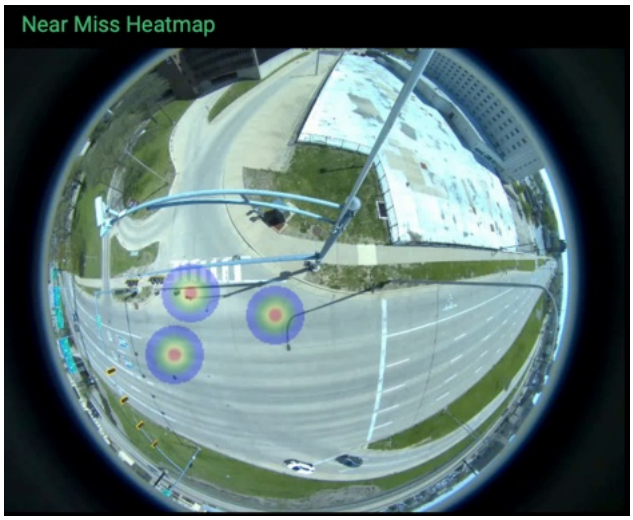
Conflict Analysis - Tools for Finding Patterns in Near Miss Events: GridMatrix's software monitors all surrogate safety metrics and flags positive events in real time, displaying them in a variety of visual formats and with filtering capabilities. These visualization tools are presented below:

Near Miss Filtering: As near misses occur in a given location, an intersection risk-profile is developed over time. Near-misses can be filtered by object-pairing. Below, near misses for buses & pedestrians are highlighted. The number of events are bucketed by the speed of the fastest moving object (e.g. 0-20mph,

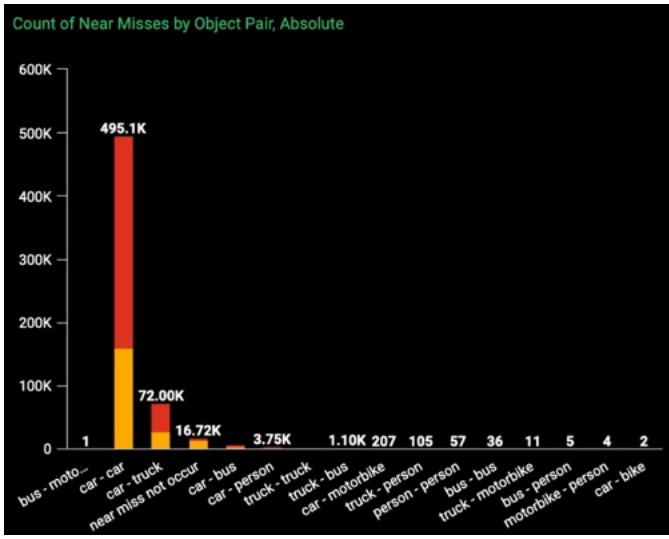
20-40mph) and by PET value. The size of the points reflects the quantity of near misses in a given bucket.

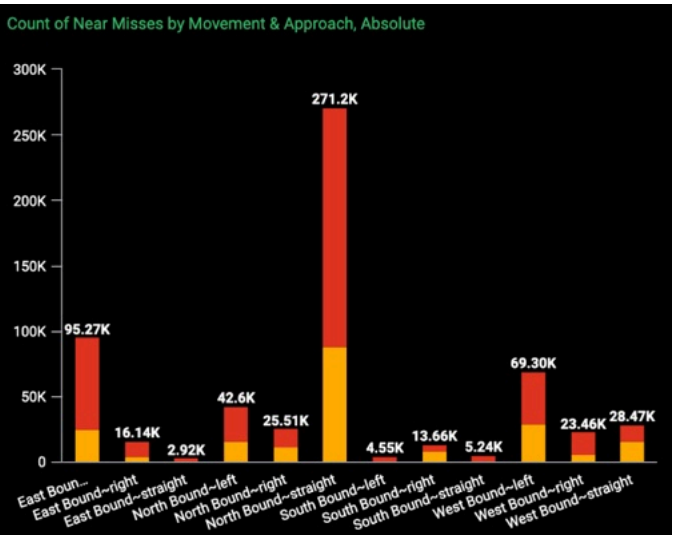


Near miss incidents generated with existing 360 degree cameras (left) and localized geospatially (right)



Count of Near Miss Events: Near miss incidents by pair and approach, severity by PET



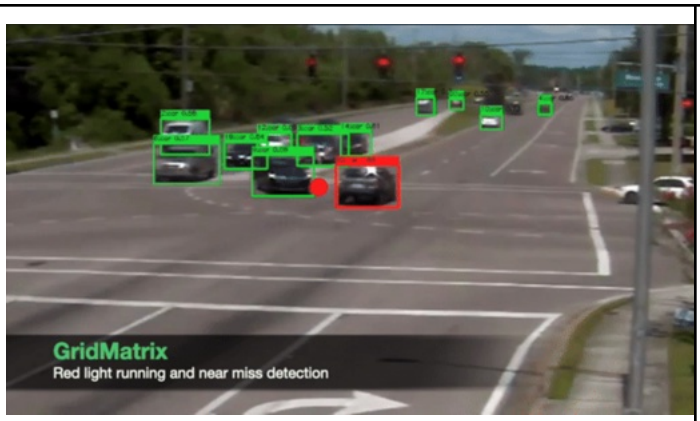


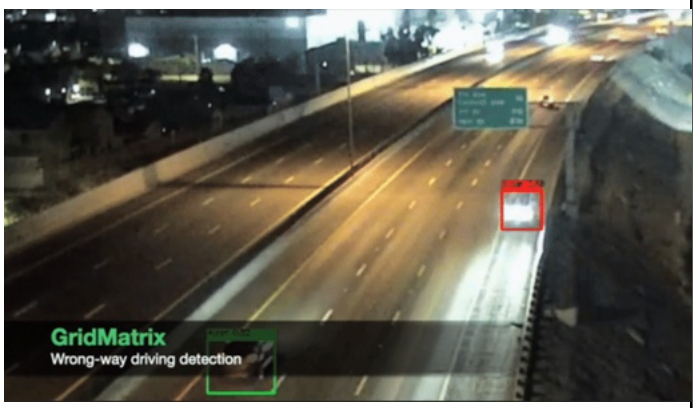
Near Miss Per Capita: Near miss incident frequencies are listed by absolute quantity in the top table. In the bottom table, these counts of near misses are adjusted by the count of road user types, to achieve a “normalized”, per capita measure of near miss frequency by road user type. This normalization compensates for the fact that passenger vehicles (for example) may be the majority of road users in a given location but near misses occur at the higher frequency between pedestrians and heavy automobiles (example below) given their respective populations. In this example, despite light automobiles (passenger vehicles) accounting for the most near misses in absolute terms (1102), they account for 23.7% of all near misses total.

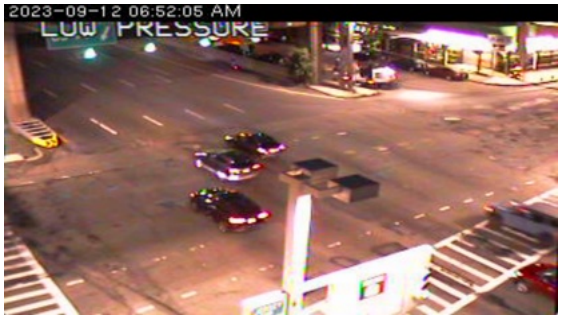
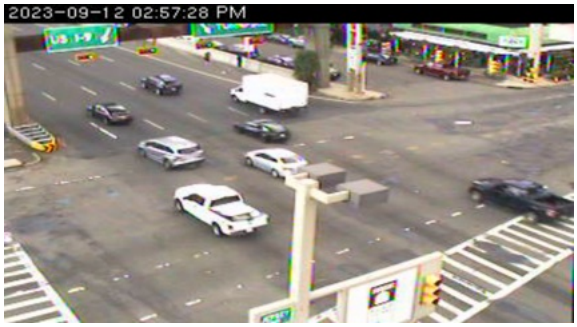
Pair	NM Count, Absolute								
	bicycle	bike	bus	car	heavy automobile	light automobile	motorbike	person	truck
bicycle						124			
bike						203			
bus			3	390		432		227	7
car						702			
heavy automob...						75			
light automob...									
motorbike									
person									
truck									

Pair	NM Count, Normalized								
	bicycle	bike	bus	car	heavy automobile	light automobile	motorbike	person	truck
bicycle						1.9%			
bike						3.1%			
bus			0.74%	24.68%		6.7%		50%	0.88%
car						10.8%			
heavy automob...						1.15%			
light automob...									
motorbike									
person									
truck									

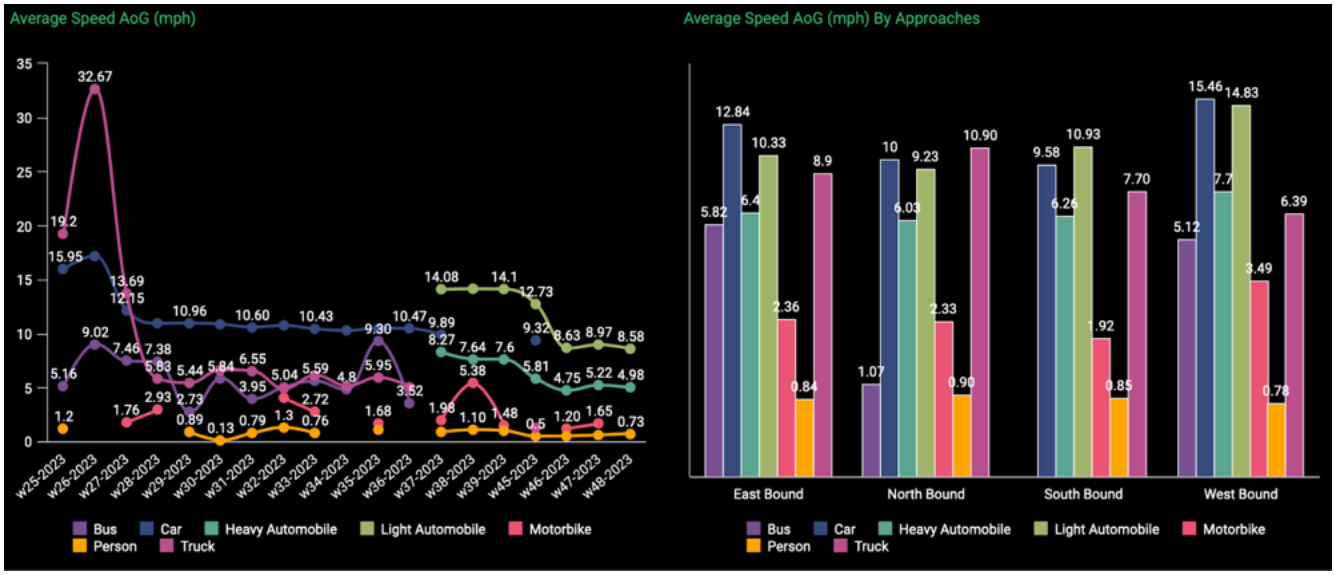
Special Events - Examples of special event detection with GridMatrix's platform





"Special Event" - Pedestrian Crosswalk Violation Examples	
Night Time Examples	**Day Time Examples**
	
Pedestrian is detected in the upper shoulder	***Pedestrian is detected in the upper shoulder***

Average Free Flow (Arrival on Green, AoG) Speeds: Speeds presented by object class as well as by approach

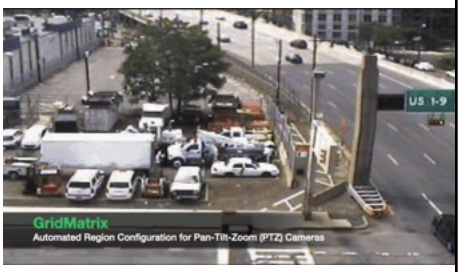
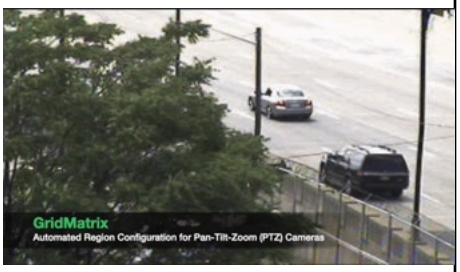


Signal Performance, Congestion Analysis & ATSPMs

Patent Pending - Pan-Tilt-Zoom (PTZ) Auto-Adjust & Support for PTZ Cameras

Pan-Tilt-Zoom (PTZ) Camera Compatibility & Operator Augmentation: GridMatrix has developed the ability for its platform to automatically detect "large" and "small" PTZ camera shifts and to adapt accordingly. "Large shifts" occur when an operator moves the camera and the intersection or other region of primary interest is no longer visible. "Small" shifts occur from environmental

disturbances such as vibration due to traffic, wind, etc. that slowly shift the camera and can increase system error if detection zones are fixed. This allows GridMatrix's system to continue to collect data from existing cameras without interfering with existing operations. Facility operators routinely use their PTZ cameras to visually investigate special situations and incidents on a daily basis to ensure smooth facility operations. An example of such a PTZ camera event investigation along with automatic shift detection is presented below:

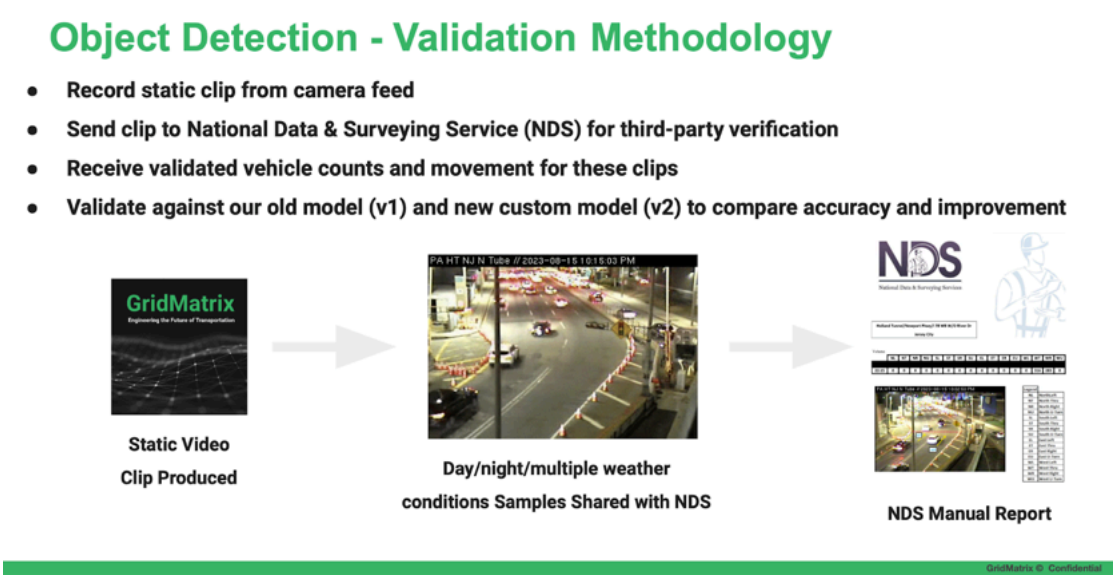
Figure 1: GridMatrix's platform collecting data by approach from a Port Authority PTZ camera. Each color is a different approach.	*Figure 2: The camera's operator has begun shifting the camera's field of view to zoom in on a disabled vehicle further up the entrance to US I-9*	*Figure 3: The camera's operator continues the shift, and GridMatrix's software identifies the camera is in a new position and stops collecting data*
		
Figure 4: The camera's operator zooms in on the disabled (gray sedan) vehicle that is blocking a lane on the entrance to US I-9	*Figure 5: The camera's operator completes their investigation of the stalled vehicle and begins shifting the camera back into its original position*	*Figure 6: GridMatrix's software identifies the camera is in its original position and resumes collecting data on congestion and other metrics*
		

GridMatrix's engineering team collected a validation data set consisting of 104 image pairs reflecting "large shifts" - shifts where the PTZ camera's primary intersection was no longer visible, and 97 image pairs of "small shifts" - shifts where the intersection was still visible. These image pairings included a diversity of lighting conditions and weather. Our third-party auditor confirmed GridMatrix's algorithm detected "large shifts" with 97% accuracy, and small shifts with 92% accuracy. Overall accuracy was 95%.

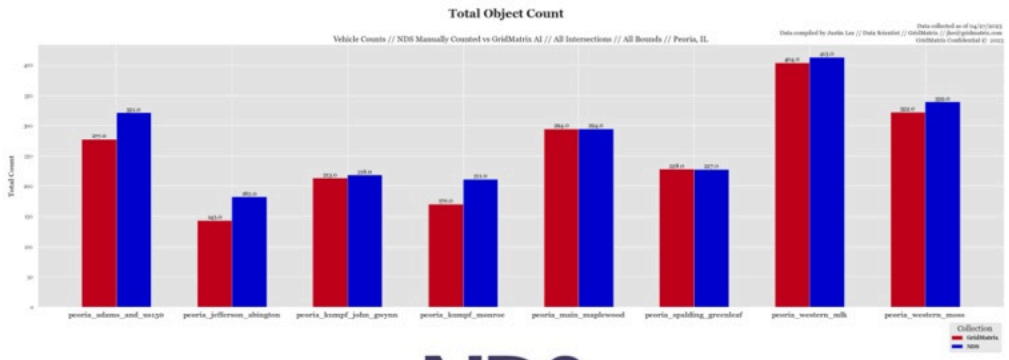
Data Accuracy & Validation

GridMatrix's multimodal detection data generated from its analytics engine is independently validated at 95% accuracy in a variety of lighting and weather conditions. GridMatrix partners with National Data and Surveying (NDS) to manually review random samples and compares NDS' results to GridMatrix's algorithmically provided results. Further, GridMatrix's QA checklist involves 50+ review items to ensure fidelity and data integrity. Final customer delivery involves sign-off from at least two members of GridMatrix's engineering team.

Validation Method: algorithm vs. manual review (red=GridMatrix algorithm, blue=NDS manual review)



Accurate, Ground Truth, Real Data on All Road Users



National Data & Surveying Services

Data Security - GridMatrix is SOC Type 2 Certified & TX-RAMP Compliant

PRESCIENT ASSURANCE

Prescient Assurance LLC
25 W 36th Street Floor 11
New York, NY 10018

August 21, 2023

GridMatrix Inc.
19800 Vallco Parkway, Unit 522, Cupertino CA 95014
Name of Signatory: Nicholas D'Andre
Phone and Email of Signatory: 650-272-9249, ndandre@gridmatrix.com

Letter of Attestation

SOC 2 Type 2 Compliance

Unqualified Opinion
In our opinion, in all material respects:

a) The description presents GridMatrix Inc.'s system that was designed and implemented throughout the period April 2, 2023 to July 2, 2023 in accordance with the description criteria.

b) The controls stated in the description were suitably designed throughout the period April 2, 2023 to July 2, 2023, to provide reasonable assurance that GridMatrix Inc.'s service commitments and system requirements would be achieved based on the applicable trust services criteria, if its controls operated effectively throughout the period, and if the subservice organization and user entities applied the complementary controls assumed in the design of GridMatrix Inc.'s controls during that period.

c) The controls stated in the description operated effectively throughout the period April 2, 2023 to July 2, 2023, to provide reasonable assurance that GridMatrix Inc.'s service commitments and system requirements were achieved based on the applicable trust services criteria, if the complementary subservice organization and complementary user entity controls assumed in the design of GridMatrix Inc.'s controls operated effectively throughout the period.

Prescient Assurance LLC confirms SOC 2 Type 2 compliance by GridMatrix Inc. in accordance with the AICPA's Trust Service Criteria for Security.

John Wallace

Prescient Assurance, LLC.
John Wallace
CPA & Partner

AICPA SOC aicpa.org/soc4so

Texas Risk and Authorization Management Program Certification

The information below is provided as a companion to the TX-RAMP Certification.

Cloud Service Name

GridMatrix: GridMatrix Insights web dashboard

Cloud Service Provider URL

https://www.gridmatrix.com/product/software.html

Cloud Service Description (200 words or less)

GridMatrix's Insights Web Dashboard for traffic analytics provides real time data on vehicular and pedestrian traffic congestion, signal performance, emissions, and road safety. Key product features include:

1) Universally compatible with existing intersection detection sensors including cameras, inductive loops, and radar
2) Compatible with LiDAR
3) Can integrate cloud based data sources such as connected vehicle, mobile phone, or satellite image data
4) Secure AWS cloud based architecture, requiring no additional hardware
5) Web based application, accessible via URL from any device

GridMatrix's Insights Web Dashboard provides data on 4 core areas, with continuous time series data available 24/7/365. Raw data and graphical analytics can be viewed in the dashboard or exported to .csv based on user preferences. Data includes:

Traffic Congestion - understand vehicular and pedestrian traffic congestion included counts, turning movements, flow, idle time, queue length, and transit time by road user class and approach

Signal performance - understand arrival on green, arrival on red, platoon ratio, effective green time by road user class and approach

Emissions - Data on CO_2 emissions and gasoline consumption by vehicle type

Safety - Identify near misses in real time and gather data on conflict zones and hazardous intersections. Receive alerts on accidents in under 1 second and accelerate emergency response times.

Certification Status

Level 1 Certification

Certification Document Generated: 4/26/2024

Texas Risk and Authorization Management Program Certification

Certificate Granted	Certification Expiration	Certificate ID
04/24/2024	04/23/2027	TX1257072

Do you provide any training services to the Customer?
Training & Support (Ongoing basis): Once GridMatrix's dashboard has been deployed and user accounts provisioned, GridMatrix will provide users with credentials and hold a kick-off meeting to orient them to the platform. GridMatrix provides users with "train the trainer" onboarding. During this session, in addition to covering operations, troubleshooting, configuration, administration, calibration, and maintenance procedures, GridMatrix will work with each of the users to explain how to train other users on the system. Under the train the trainer system, GridMatrix expects to help certain customer users learn the ins and outs of the software to an extent that they will be able to be front-line experts. After the initial session, the project management team will provide bi-weekly check-ins for any additional questions, in-person meetings when necessary, and will otherwise be available for video, call, or email to provide additional support whenever necessary to maximize platform impact.

TAB B - Proposal Pricing

Under this Tab, you are to furnish Exhibit 1 (BID PRICE WORKSHEET) & Exhibit 2 (MARKET BASKET WORKSHEET). Your pricing shall be based on a percentage discount for each item you are bidding on. In addition, you are to provide in a separate document your current published unit pricing for the products you intend to provide. Due to constant price changes, the current published unit pricing is not a contractual obligation, but you will provide NCTCOG an updated price list as yours changes over time. However, the awarded vendor will only be obligated to honor the percentage discount. When preparing a quote for a Customer, you are expected to show on the quote your current published unit price, contracted percentage discount, and the net price for the item. The intent of your providing a current price list is for the Customer to be able calculate their actual cost by applying the contracted percent discount to your published unit pricing. Failure to submit Exhibit 1 or 2 may result in your proposal being disqualified as non-responsive.

Please see Exhibit 1 & Exhibit 2 attached to this document for proposal pricing as well as a link and supporting documentation for current published/nationally advertised pricing.

TAB C - REFERENCES

Include a list of five (5) references for relevant contracts awarded within the last five years, preferably from a government customer. Include customer name, point of contact, address, phone number, and email address. NCTCOG may contact references provided regarding the firm's past performance.

Project #1 - NYC Bridges & Tunnels Get AI Traffic Analytics from GridMatrix
Sponsoring Agency: Port Authority of New York and New Jersey
Scope: GridMatrix deployed using existing cameras on the Lincoln Tunnel, Holland Tunnel, and George Washington Bridge to collect data multimodal data on traffic congestion, emissions, and safety including near-miss events
Project Manager Name // Title // Email // Phone // Address: Terriann Moore-Abrams // tmabrams@panynj.gov // 917-576-7577 // 150 Greenwich Street, New York, NY 10006

Project #2 - GridMatrix Texas DIR (Contract #DIR-CPO-5299)
Sponsoring Agency: Texas Department of Information Resources
Scope: GridMatrix was selected by the Texas Department of Information Resources (the State Technology Agency of the State of Texas) to provide commercial off-the-shelf "COTS" software services for roadway traffic analytics, critical infrastructure optimization, and other transportation planning and analysis use cases using edge sensors including cameras, radar, lidar, and inductive loops as well as supporting services.
Project Manager Name // Title // Email // Phone // Address: Suzanne Carson // Contract Administrator // suzanne.carson@dir.texas.gov // 52-475-4948 // 300 W 15th St #1300, Austin, TX 78701

Project #3 - **US DOT Partnership to Develop Predictive Models for Emergency Responders**
Sponsoring Agency: US Department of Transportation
Scope: GridMatrix developed a real time safety index for transit vehicles using near-miss data, crash data, and NOAA meteorological data
Project Manager Name // Title // Email // Phone // Address: David Schneider // Acting Deputy Associate Administrator, Federal Transit Administration Office of Research, Demonstration, and Innovation // David.Schneider@dot.gov // 202-493-0175 // 1200 New Jersey Avenue SE, Washington DC, 20590

Project #4 - GridMatrix Deploys In Peoria, IL
Sponsoring Agency: Hanson Inc. on behalf of the city of Peoria
Scope: GridMatrix deployed its platform on existing Peoria 360 degree cameras to collect multimodal traffic data collection
Project Manager Name // Title // Email // Phone // Address: Kurt Bialobreski // Chief Innovation Officer // kbialobreski@hanson-inc.com // 309-713-1408 // 7625 N. University Street Suite 200, Peoria, IL 61614

Project #5 - San Mateo County Deploys GridMatrix for Vision Zero
Sponsoring Agency: San Mateo County
Scope: GridMatrix is deploying its software along a critical corridor to measure near-misses and other safety metrics to help San Mateo County reach its vision zero goals

Project Manager Name // Title // Email // Phone // Address: Alfred Torres // Information Services Department ISD Contracts & Procurement // aktorres@smcgov.org // 650-363-4548 // 455 County Center, ISD 3rd Floor, Redwood City, CA 94063

Additional Reference:

Project #6 - GridMatrix Deploys At California State University, Sacramento
Sponsoring Agency: California State University, Sacramento
Scope: GridMatrix is operating its platform on Sac State's campus to gather data on pedestrian and cyclists counts, near misses, and campus ingress/egress
Project Manager Name // Title // Email // Phone // Address: Jeff Dierking // Director, University Transportation & Parking Services // jeffrey.dierking@csus.edu // 916-278-2604 // 6000 J Street, Sacramento, CA 95819

TAB D - REQUIRED ATTACHMENTS

Exhibits 1-3 and required Attachments I-XI follow

Exhibit 1

Page 23 of RFP

EXHIBIT 1
CATEGORIES SELECTED, PRICING & CURRENT PUBLISHED PRICE LIST

- **Please place a checkmark next to each Category that you are offering in your proposal:**

  _____ Service Category #1: Preventative Maintenance Services
  _____ Service Category #2: Emergency & Non-Emergency Repair Services
  __X__ Service Category #3: Ancillary Service, Maintenance, Equipment & Supplies

- **Proposed Contractual Discounts on Pricing for Categories Offered**

  For each of the categories you selected above, provide your proposed **discount** off your list price on the attached *Bid Price Worksheet.* You may offer tiers of discounts based on the different bid items or the sale quantity.

  Please see Bid Price Worksheet for proposed discount on a per item basis

- **Current Published Price List for Items Offered**

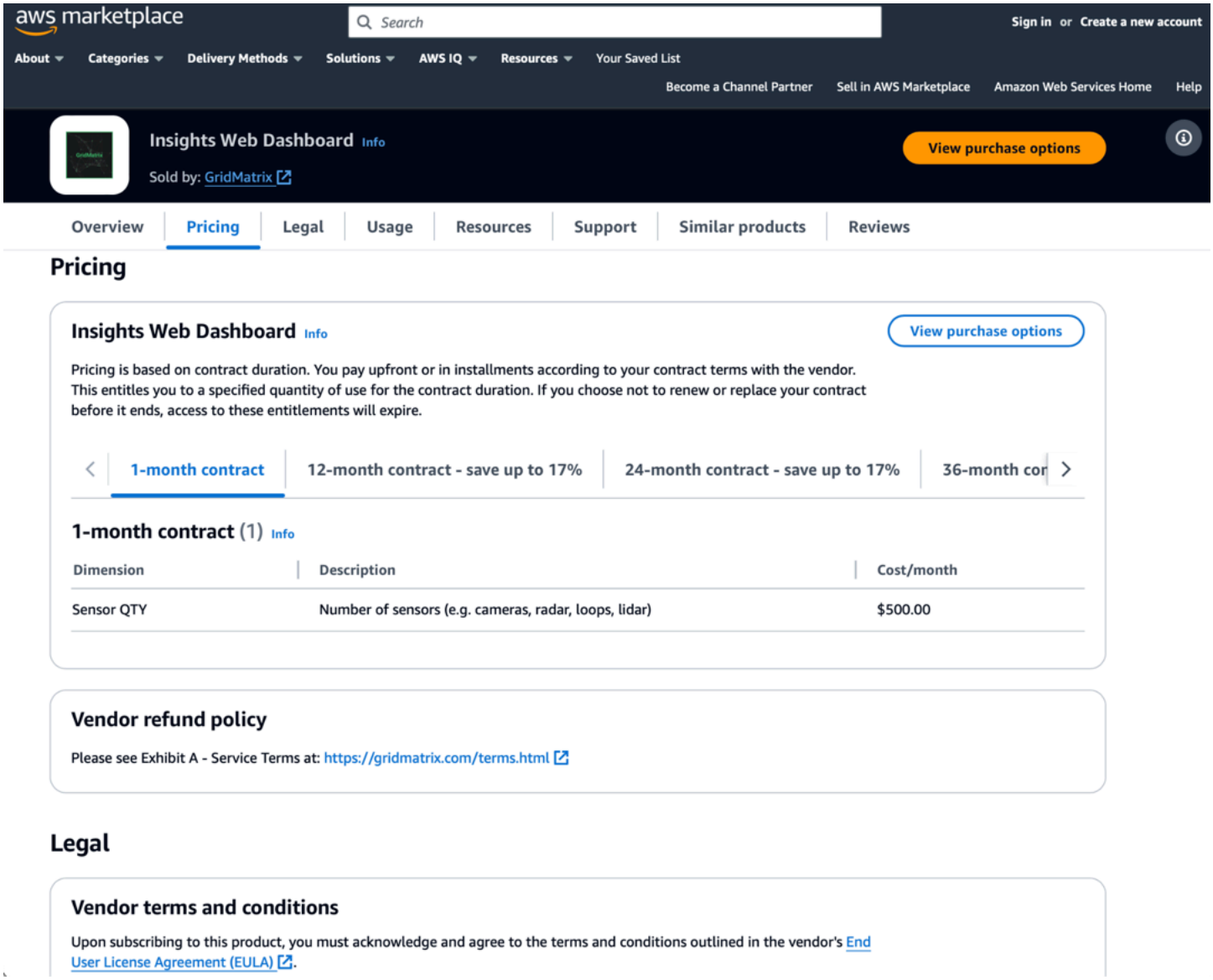
  For each of the bid items you wish to offer, please provide the current published list price. Please attach this information to your proposal on a separate sheet or via a weblink. Please match the Category item number from the Bid Price Worksheet to the matching item on your current published price list.

  NOTE: The current price list will NOT be a part of your contractual obligation and may be modified at your discretion during the term of any contract that is awarded to you. You are however requested to provide us with an updated version of the current price list whenever it is updated. Only the percentage discount is contractually obligated.

  Current published list price/nationally advertised pricing is available on GridMatrix's AWS Marketplace web page

GridMatrix Published/Nationally Advertised Pricing

Link to published/nationally advertised pricing - [GridMatrix AWS Marketplace Pricing]



BID PRICE WORKSHEET FOR RFP #2024-132

Category #1 - Not Applicable/No Bid
Category #2 - Not Applicable/No Bid

Category 3: Ancillary Service, Maintenance, Equipment & Supplies

Item	Description	% Discount Off Unit List Price
8	Describe Below:	

Index	Manufacturer	Product Description	Item Type	Item QTY	MSRP	Scope	NCTCOG Customer Discount	NCTCOG Customer Price
1	GridMatrix	GridMatrix Software Plaform- camera/LiDAR based	Software	1x Camera/LiDAR	$500	Per Sensor/Per Month	-49.62%	$251.88
2	GridMatrix	GridMatrix Software Plaform- camera/LiDAR based	Software	2x Camera/LiDAR	$500	Per Sensor/Per Month	-39.55%	$302.25
3	GridMatrix	GridMatrix Software Plaform- camera/LiDAR based	Software	4x Camera/LiDAR	$500	Per Sensor/Per Month	-19.40%	$403.00
4	GridMatrix	GridMatrix Software Plaform - radar based	Software	1x Radar	$500	Per Sensor/Per Month	-74.81%	$125.94
5	GridMatrix	GridMatrix Software Plaform - radar based	Software	2x Radar	$500	Per Sensor/Per Month	-69.75%	$151.23
6	GridMatrix	GridMatrix Software Plaform - radar based	Software	4x Radar	$500	Per Sensor/Per Month	-59.70%	$201.50
7	GridMatrix	GridMatrix Software Plaform - loop based	Software	4x Loop	$500	Per Sensor/Per Month	-91.94%	$40.30
8	GridMatrix	GridMatrix Software Plaform - loop based	Software	6x Loop	$500	Per Sensor/Per Month	-87.91%	$60.45
9	GridMatrix	GridMatrix Software Plaform - other sensor	Software	1x Sensor	$500	Per Sensor/Per Month	-49.62%	$251.88
10	GridMatrix	Support for software	Labor	1x Intersection	$20	Per Sensor/Per Month	-50.00%	$10.00
11	GridMatrix	Blended engineering/data sciences/software product development hourly rate	Labor	1x Hour	$280	Per Hour	-37.50%	$175.00
12	GridMatrix	Blended project management/administrative services hourly rate	Labor	1x Hour	$200	Per Hour	-37.50%	$125.00
13	GridMatrix	Server with GPUs for On-Premise Deployment	Hardware	1x Server	$20,000	Per Server	-30.00%	$14,000

Exhibit 2

Exhibit 2 - Market Basket Worksheet for RFP #2024-132

Category 1: Preventative Maintenance Services

Item	Description	(Assuming job location is 10 miles from your facility)	Unit of Measure	Current List Price	% Discount	Net Price After Discount
1	Routine Maintenance of Signal	Not offered by GridMatrix				
2	Opticom Regular Inspection	Not offered by GridMatrix				

Category 2: Emergency & Non-Emergency Repair Services

Item	Description	Unit of Measure	Current List Price	% Discount	Net Price After Discount
29	Mobilization — Not offered by GridMatrix				
30	Bucket Truck — Not offered by GridMatrix				
17	Travel Time — Not offered by GridMatrix				
18	Labor — Rates vary by skill & role and are specified in Exhibit 1				
19	Labor - After Hours — Same as 18				
21	Traffic Control) - Off-Duty Uniformed Law Enforcement Officers with Vehicle — Not offered by GridMatrix				
22	Traffic Control - Advanced Warning Arrow Panel (Trailer Mounted, Electric, All Types) — Not offered by GridMatrix				
27	Traffic Control - Cone Reflectorized (25" min height) — Not offered by GridMatrix				
28	Traffic Control - Flags 24" X 24" — Not offered by GridMatrix				

GridMatrix is offering alternative services (Category #3) and has created a hypothetical goods basket below for the purposes of illustration:

Hypothetical deployment scope: GridMatrix cloud-based deployment (no-server) at 100 intersections with 1x camera per intersection with a 1 year service term:

Index	Manufacturer	Product Description	Item Type	Item QTY	Scope	NCTCOG Customer Price	Sensor/Intersection QTY	Service Months Qty	Extended Price
1	GridMatrix	GridMatrix Software Plaform-camera/LiDAR based	Software	1x Camera/LiDAR	Per Sensor/Per Month	$251.88	100	12	$302,256
2	GridMatrix	Support for software	Labor	1x Intersection	Per Sensor/Per Month	$10.00	100	12	$12,000
	Total, GridMatrix software deployment (cloud-based) @ 100 intersections with 1x camera/intersection for 12 month service term @ NCTCOG proposed pricing								**$314,256**

Exhibit 3

	Nationwide Service Area Designation or Identification Form	
Proposing Firm Name:		
Notes:	**Indicate in the appropriate box whether you are proposing to provide service to all Fifty (50) States.**	
	Will service all fifty (50) states X	Will not service fifty (50) states

GridMatrix will service all 50 states

Attachment I

ATTACHMENT I:
INSTRUCTIONS FOR PROPOSALS COMPLIANCE AND SUBMITTAL

REQUIRED ATTACHMENT CHECKLIST

This checklist is provided as a courtesy to responding firms. Please utilize this checklist to ensure that all required attachments are included with your proposal. IF AN ATTACHMENT DOES NOT APPLY, PLEASE MARK AS "**NOT APPLICABLE**" AND SUBMIT WITH THE PROPOSAL. **FAILURE TO SUBMIT ALL REQUIRED DOCUMENTS** MAY NEGATIVELY IMPACT YOUR EVALUATION SCORE.

- ☒ Cover Sheet
- ☒ Exhibit 1: Categories Selected, Pricing & Current Published Price List
- ☒ Exhibit 2: Sample Market Basket Form
- ☒ Exhibit 3: Service Area Designation Forms
- ☒ Attachment I: Instructions for Proposals Compliance and Submittal
- ☒ Attachment II: Certification of Offeror
- ☒ Attachment III: Certification Regarding Debarment
- ☒ Attachment IV: Restrictions on Lobbying
- ☒ Attachment V: Drug-Free Workplace Certification
- ☒ Attachment VI: Certification Regarding Disclosure of Conflict of Interest
- ☒ Attachment VII: Certification of Fair Business Practices
- ☒ Attachment VIII: Certification of Good Standing Texas Corporate Franchise Tax Certification
- ☒ Attachment IX: Historically Underutilized Businesses, Minority Or Women-Owned Or Disadvantaged Business Enterprises
- ☒ Attachment X: Federal and State of Texas Required Procurement Provisions
- ☒ Attachment XI: Conflict of Interest Questionnaire

Compliance with the Solicitation

Submissions must be in strict compliance with this solicitation. Failure to comply with all provisions of the solicitation may result in disqualification. You recognize that all proposals must be submitted electronically through PublicPurchase.com by the RFP due date and time. All other forms of submissions will be deemed nonresponsive and will not be opened or considered.

Acknowledgment of Insurance Requirements

By signing its submission, you acknowledge that it has read and understands the insurance requirements for the submission. You also understand that the evidence of required insurance may be requested to be submitted within ten (10) working days following notification of its offer being accepted; otherwise, NCTCOG may rescind its acceptance of your proposal. The insurance requirements are outlined in Section 6.4.

GridMatrix, Inc.

Name of Organization/Contractor

Signature of Authorized Representative

Nicholas D'Andre, CEO

Printed/Typed Name and Title of Authorized Representative

September 30th, 2024

Date

Attachment II

ATTACHMENT II:
CERTIFICATIONS OF OFFEROR

I hereby certify that the information contained in this proposal and any attachments is true and correct and may be viewed as an accurate representation of proposed services to be provided by this organization. I certify that no employee, board member, or agent of the North Central Texas Council of Governments has assisted in the preparation of this proposal. I agree that failure to submit all requested information may result in rejection of this proposal as non-responsive. I acknowledge that I have read and understand the requirements and provisions of the solicitation and that the organization will comply with the regulations and other applicable local, state, and federal regulations and directives in the implementation of this contract.

I also certify that I have read and understood all sections of this solicitation and will comply with all the terms and conditions as stated; and furthermore that I, Nicholas D'Andre (typed or printed name) certify that I am the CEO (title) of the corporation, partnership, or sole proprietorship, or other eligible entity named as you and you herein and that I am legally authorized to sign this offer and to submit it to the North Central Texas Council of Governments, on behalf of said Offeror by authority of its governing body.

GridMatrix, Inc.
Name of Organization/Contractor

Signature of Authorized Representative

Nicholas D'Andre, CEO
Printed/Typed Name and Title of Authorized Representative

September 30th, 2024
Date

Attachment III

Page 34 of RFP

ATTACHMENT III:
CERTIFICATION REGARDING DEBARMENT, SUSPENSION AND OTHER RESPONSIBILITY MATTERS

This certification is required by the Federal Regulations Implementing Executive Order 12549, Debarment and Suspension, 45 CFR Part 93, Government-wide Debarment and Suspension, for the Department of Agriculture (7 CFR Part 3017), Department of Labor (29 CFR Part 98), Department of Education (34 CFR Parts 85, 668, 682), Department of Health and Human Services (45 CFR Part 76).

The undersigned certifies, to the best of his or her knowledge and belief, that both it and its principals:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency;

2. Have not within a three-year period preceding this contract been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or Local) transaction or contract under a public transaction, violation of federal or State antitrust statues or commission of embezzlement, theft, forgery, bribery, falsification, or destruction of records, making false Proposals, or receiving stolen property;

3. Are not presently indicated for or otherwise criminally or civilly charged by a government entity with commission of any of the offense enumerated in Paragraph (2) of this certification; and,

4. Have not within a three-year period preceding this contract had one or more public transactions terminated for cause or default.

Where the prospective recipient of federal assistance funds is unable to certify to any of the qualifications in this certification, such prospective recipient shall attach an explanation to this certification form.

GridMatrix, Inc.

Name of Organization/Contractor(s):

Q1WTHTFQ5RA4

SAM.GOV Unique Identity ID:

Signature of Authorized Representative

Nicholas D'Andre, CEO

Printed/Typed Name and Title of Authorized Representative

September 30th, 2024

Date

Attachment IV

ATTACHMENT IV:
RESTRICTIONS ON LOBBYING

Section 319 of Public Law 101-121 prohibits recipients of federal contracts, grants, and loans exceeding $100,000 at any tier under a federal contract from using appropriated funds for lobbying the Executive or Legislative Branches of the federal government in connection with a specific contract, grant, or loan. Section 319 also requires each person who requests or receives a federal contract or grant in excess of $100,000 to disclose lobbying.

No appropriated funds may be expended by the recipient of a federal contract, loan, or cooperative agreement to pay any person for influencing or attempting to influence an officer or employee of any federal executive department or agency as well as any independent regulatory commission or government corporation, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any of the following covered federal actions: the awarding of any federal contract, the making of any federal grant, the making of any federal loan the entering into of any cooperative agreement and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.

As a recipient of a federal grant exceeding $100,000, NCTCOG requires its subcontractors of that grant to file a certification, set forth in Appendix B.1, that neither the agency nor its employees have made, or will make, any payment prohibited by the preceding paragraph.

Subcontractors are also required to file with NCTCOG a disclosure form, set forth in Appendix B.2, if the subcontractor or its employees have made or have agreed to make any payment using nonappropriated funds (to include profits from any federal action), which would be prohibited if paid for with appropriated funds.

LOBBYING CERTIFICATION
FOR CONTRACTS, GRANTS, LOANS, AND COOPERATIVE AGREEMENTS

The undersigned certifies, to the best of his or her knowledge or belief, that:

1. No federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an officer or employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal loan, the entering into of any cooperative Contract, and the extension, continuation, renewal, amendment, or modification or any federal contract, grant, loan, or cooperative contract; and

2. If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this federal contract, grant, loan, and or cooperative contract, the undersigned shall complete and submit Standard Form – LLL, "Disclosure Form to Report Lobbying", in accordance with the instructions.

3. The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers and that all sub-recipients shall certify accordingly.

GridMatrix, Inc.

Name of Organization/Contractor

Signature of Authorized Representative

Nicholas D'Andre, CEO

Printed/Typed Name and Title of Authorized Representative

September 30th, 2024

Date

Attachment V

ATTACHMENT V:
DRUG-FREE WORKPLACE CERTIFICATION

The GridMatrix, Inc. (company name) will provide a Drug Free Work Place in compliance with the Drug Free Work Place Act of 1988. The unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited on the premises of the GridMatrix, Inc. (company name) or any of its facilities. Any employee who violates this prohibition will be subject to disciplinary action up to and including termination. All employees, as a condition of employment, will comply with this policy.

CERTIFICATION REGARDING DRUG-FREE WORKPLACE
This certification is required by the Federal Regulations Implementing Sections 5151-5160 of the Drug-Free Workplace Act, 41 U.S.C. 701, for the Department of Agriculture (7 CFR Part 3017), Department of Labor (29 CFR Part 98), Department of Education (34 CFR Parts 85, 668 and 682), Department of Health and Human Services (45 CFR Part 76).

The undersigned subcontractor certifies it will provide a drug-free workplace by:

Publishing a policy Proposal notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the workplace and specifying the consequences of any such action by an employee;

Establishing an ongoing drug-free awareness program to inform employees of the dangers of drug abuse in the workplace, the subcontractor's policy of maintaining a drug-free workplace, the availability of counseling, rehabilitation and employee assistance programs, and the penalties that may be imposed on employees for drug violations in the workplace;

Providing each employee with a copy of the subcontractor's policy Proposal;

Notifying the employees in the subcontractor's policy Proposal that as a condition of employment under this subcontract, employees shall abide by the terms of the policy Proposal and notifying the subcontractor in writing within five days after any conviction for a violation by the employee of a criminal drug abuse statue in the workplace;

Notifying the Board within ten (10) days of the subcontractor's receipt of a notice of a conviction of any employee; and,

Taking appropriate personnel action against an employee convicted of violating a criminal drug statue or requires such employee to participate in a drug abuse assistance or rehabilitation program.

GridMatrix, Inc.
Name of Organization/Contractor

Signature of Authorized Representative

Nicholas D'Andre, CEO
Printed/Typed Name and Title of Authorized Representative

September 30th, 2024
Date

Attachment VI

ATTACHMENT VI:
CERTIFICATION REGARDING DISCLOSURE OF CONFLICT OF INTEREST

The undersigned certifies that, to the best of his or her knowledge or belief, that:

"No employee of the contractor, no member of the contractor's governing board or body, and no person who exercises any functions or responsibilities in the review or approval of the undertaking or carrying out of this contract shall participate in any decision relating to this contract which affects his/her personal pecuniary interest.

Executives and employees of contractor shall be particularly aware of the varying degrees of influence that can be exerted by personal friends and associates and, in administering the contract, shall exercise due diligence to avoid situations which give rise to an assertion that favorable treatment is being granted to friends and associates. When it is in the public interest for the contractor to conduct business with a friend or associate of an executive or employee of the contractor, an elected official in the area or a member of the North Central Texas Council of Governments, a permanent record of the transaction shall be retained.

Any executive or employee of the contractor, an elected official in the area or a member of the NCTCOG, shall not solicit or accept money or any other consideration from a third person, for the performance of an act reimbursed in whole or part by contractor or Department. Supplies, tools, materials, equipment or services purchased with contract funds shall be used solely for purposes allowed under this contract. No member of the NCTCOG shall cast a vote on the provision of services by that member (or any organization which that member represents) or vote on any matter which would provide a direct or indirect financial benefit to the member or any business or organization which the member directly represents".

No officer, employee or paid consultant of the contractor is a member of the NCTCOG.

No officer, manager or paid consultant of the contractor is married to a member of the NCTCOG.

No member of NCTCOG directly owns, controls or has interest in the contractor.

The contractor has disclosed any interest, fact, or circumstance that does or may present a potential conflict of interest.

No member of the NCTCOG receives compensation from the contractor for lobbying activities as defined in Chapter 305 of the Texas Government Code.

Should the contractor fail to abide by the foregoing covenants and affirmations regarding conflict of interest, the contractor shall not be entitled to the recovery of any costs or expenses incurred in relation to the contract and shall immediately refund to the North Central Texas Council of Governments any fees or expenses that may have been paid under this contract and shall further be liable for any other costs incurred or damages sustained by the NCTCOG as it relates to this contract.

GridMatrix, Inc.
Name of Organization/Contractor

Signature of Authorized Representative:

Nicholas D'Andre, CEO
Printed/Typed Name and Title of Authorized Representative

September 30th, 2024
Date

Attachment VII

ATTACHMENT VII:
CERTIFICATION OF FAIR BUSINESS PRACTICES

That the submitter has not been found guilty of unfair business practices in a judicial or state agency administrative proceeding during the preceding year. The submitter further affirms that no officer of the submitter has served as an officer of any company found guilty of unfair business practices in a judicial or state agency administrative during the preceding year.

GridMatrix, Inc.

Name of Organization/Contractor

Signature of Authorized Representative

Nicholas D'Andre, CEO

Printed/Typed Name and Title of Authorized Representative

September 30th, 2024

Date

Attachment VIII

ATTACHMENT VIII:
CERTIFICATION OF GOOD STANDING
TEXAS CORPORATE FRANCHISE TAX CERTIFICATION

Pursuant to Article 2.45, Texas Business Corporation Act, state agencies may not contract with for profit corporations that are delinquent in making state franchise tax payments. The following certification that the corporation entering into this offer is current in its franchise taxes must be signed by the individual authorized on Form 2031, Corporate Board of Directors Resolution, to sign the contract for the corporation.

The undersigned authorized representative of the corporation making the offer herein certified that the following indicated Proposal is true and correct and that the undersigned understands that making a false Proposal is a material breach of contract and is grounds for contract cancellation.

Indicate the certification that applies to your corporation:

X — The Corporation is a for-profit corporation and certifies that it is not delinquent in its franchise tax payments to the State of Texas.

_____ — The Corporation is a non-profit corporation or is otherwise not subject to payment of franchise taxes to the State of Texas.

Type of Business (if not corporation):

- ☐ Sole Proprietor
- ☐ Partnership
- ☒ Other C-Corp

Pursuant to Article 2.45, Texas Business Corporation Act, the North Central Texas Council of Governments reserves the right to request information regarding state franchise tax payments.

GridMatrix, Inc.
Name of Organization/Contractor


Signature of Authorized Representative

Nicholas D'Andre, CEO
Printed/Typed Name and Title of Authorized Representative

September 30th, 2024
Date

Attachment IX

ATTACHMENT IX:
HISTORICALLY UNDERUTILIZED BUSINESSES, MINORITY OR WOMEN-OWNED OR DISADVANTAGED BUSINESS ENTERPRISES

Historically Underutilized Businesses (HUBs), minority or women-owned or disadvantaged businesses enterprises (M/W/DBE) are encouraged to participate in the solicitation process.

NCTCOG recognizes the certifications of most agencies. This applies only to the Offeror and not a subcontractor. HUB vendors must submit a copy of their certification for consideration during the evaluation of their proposal. Please attach a copy to this form.

Texas vendors who are not currently certified are encouraged to contact either the Texas United Certification Program, State of Texas HUB Program, or the North Central Texas Regional Certification Agency, among others. Contact:

State of Texas HUB Program
Texas Comptroller of Public Accounts
Lyndon B. Johnson State Office Building
111 East 17th Street
Austin, Texas 78774
(512) 463-6958
http://www.window.state.tx.us/procurement/prog/hub/

North Central Texas Regional Certification Agency
624 Six Flags Drive, Suite 100
Arlington, TX 76011
(817) 640-0606
http://www.nctrca.org/certification.html

Texas United Certification Program
USDOT website at
https://www.transportation.gov/DBE

You must include a copy of your certification document as part of this solicitation to receive points in the evaluation.

Vendor to Sign Below to Attest to Validity of Certification:

GridMatrix, Inc.
Vendor Name


Authorized Signature

Nicholas D'Andre, CEO
Typed Name

September 30th, 2024
Date

GridMatrix is not currently registered as a HUB, MBE, WBE, or DBE

Attachment X

ATTACHMENT X
NCTCOG FEDERAL AND STATE OF TEXAS REQUIRED PROCUREMENT PROVISIONS

Note: The following provisions are mandated by Federal and/or State of Texas law. Failure to certify the following will result in disqualification of consideration for contract. Entities or agencies that are not able to comply with the following statements will be ineligible for consideration of contract award.

PROHIBITED TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT CERTIFICATION

This Contract is subject to the Public Law 115-232, Section 889, and 2 Code of Federal Regulations (CFR) Part 200, including §200.216 and §200.471, for prohibition on certain telecommunications and video surveillance or equipment. Public Law 115-232, Section 889, identifies that restricted telecommunications and video surveillance equipment or services (e.g., phones, internet, video surveillance, cloud servers) include the following:

A) Telecommunications equipment that is produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliates of such entities).
B) Video surveillance and telecommunications equipment produced by Hytera Communications Corporations, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliates of such entities).
C) Telecommunications or video surveillance services used by such entities or using such equipment.
D) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, Director of the National Intelligence, or the Director of the Federal Bureau of Investigation reasonably believes to be an entity owned or controlled by the government of a covered foreign country. The entity identified below, through its authorized representative, hereby certifies that no funds under this Contract will be obligated or expended to procure or obtain telecommunication or video surveillance services or equipment or systems that use covered telecommunications equipment or services as a substantial or essential component of any system, or as a critical technology as part of any system prohibited by 2 CFR §200.216 and §200.471, or applicable provisions in Public Law 115-232 Section 889.

☒ **The Contractor or Subrecipient hereby certifies that it does comply with the requirements of 2 CFR §200.216 and §200.471, or applicable regulations in Public Law 115-232 Section 889.**

GridMatrix, Inc.
Name of Organization/Contractor

Signature of Authorized Representative

Nicholas D'Andre, CEO
Printed/Typed Name and Title of Authorized Representative

September 30th, 2024
Date:

(Attachment X: Cont.)

DISCRIMINATION AGAINST FIREARMS ENTITIES OR FIREARMS TRADE ASSOCIATIONS

This contract is subject to the Texas Local Government Code chapter 2274, Subtitle F, Title 10, prohibiting contracts with companies who discriminate against firearm and ammunition industries. TLGC chapter 2274, Subtitle F, Title 10, identifies that "discrimination against a firearm entity or firearm trade association" includes the following:

A) means, with respect to the entity or association, to:
   I. refuse to engage in the trade of any goods or services with the entity or association based solely on its status as a firearm entity or firearm trade association; and
   II. refrain from continuing an existing business relationship with the entity or association based solely on its status as a firearm entity or firearm trade association; or
   III. terminate an existing business relationship with the entity or association based solely on its status as a firearm entity or firearm trade association.

B) An exception to this provision excludes the following:
   I. contracts with a sole-source provider; or
   II. the government entity does not receive bids from companies who can provide written verification.

The entity identified below, through its authorized representative, hereby certifies that they have no practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association; and that they will not discriminate during the term of the contract against a firearm entity or firearm trade association as prohibited by Chapter 2274, Subtitle F, Title 10 of the Texas Local Government Code.

☒ **The Contractor or Subrecipient hereby certifies that it does comply with the requirements of Chapter 2274, Subtitle F, Title 10.**

Name of Organization/Contractor GridMatrix, Inc.

Signature of Authorized Representative

Nicholas D'Andre, CEO

Printed/Typed Name and Title of Authorized Representative

September 30th, 2024

Date

BOYCOTTING OF CERTAIN ENERGY COMPANIES

This contract is subject to the Texas Local Government Code chapter 809, Subtitle A, Title 8, prohibiting contracts with companies who boycott certain energy companies.

TLGC chapter Code chapter 809, Subtitle A, Title 8, identifies that "boycott energy company" means, without an ordinary business purpose, refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations with a company because the company:

I. engages in the exploration, production, utilization, transportation, sale, or manufacturing of fossil fuel-based energy and does not commit or pledge to meet environmental standards beyond applicable federal and state law; and

II. does business with a company described by paragraph (I).

The entity identified below, through its authorized representative, hereby certifies that they do not boycott energy companies, and that they will not boycott energy companies during the term of the contract as prohibited by Chapter 809, Subtitle A, Title 8 of the Texas Local Government Code.

☒ **The Contractor or Subrecipient hereby certifies that it does comply with the requirements of Chapter 809, Subtitle A, Title 8.**

GridMatrix, Inc.
Name of Organization/Contractor


Signature of Authorized Representative

Nicholas D'Andre, CEO
Printed/Typed Name and Title of Authorized Representative

September 30th, 2024
Date

Attachment XI

CONFLICT OF INTEREST QUESTIONNAIRE

FORM CIQ

For vendor doing business with local governmental entity

This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. *See* Section 176.006(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

OFFICE USE ONLY
Date Received

1 **Name of vendor who has a business relationship with local governmental entity.**

N/A None

2 ☐ **Check this box if you are filing an update to a previously filed questionnaire.** (The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

3 **Name of local government officer about whom the information is being disclosed.**

N/A None

Name of Officer

4 **Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. Complete subparts A and B for each employment or business relationship described. Attach additional pages to this Form CIQ as necessary.**

A. Is the local government officer or a family member of the officer receiving or likely to receive taxable income, other than investment income, from the vendor?

☐ Yes ☐ No N/A

B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer or a family member of the officer AND the taxable income is not received from the local governmental entity?

☐ Yes ☐ No N/A

5 **Describe each employment or business relationship that the vendor named in Section 1 maintains with a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more.**

N/A None

6 ☐ Check this box if the vendor has given the local government officer or a family member of the officer one or more gifts as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.003(a-1). N/A

7 Nicholas D'Andre, CEO — September 30th, 2024

Signature of vendor doing business with the governmental entity — Date

Form provided by Texas Ethics Commission www.ethics.state.tx.us Revised 1/1/2021